

<http://annabelkim.blogspot.com.au/> JO

<http://joshuasleight.blogspot.com.au/> ROS

<http://jinchengjiang.blogspot.com.au/> JEREMY

<http://kylandavidlow.blogspot.com.au/> JAMES

<http://dkyarch1101.blogspot.com.au/> SHAOWEN

<http://hengweizhangg.blogspot.com.au> VINH

Personal favorites:

<http://yuexin-michelle-liu.blogspot.com.au/> JAMES

<http://csveas.blogspot.com.au/> SHAOWEN

# **BLOGS OF THE WEEK**

**THE BLACK BOX  
BETWEEN ARCH  
DRAWING 1101  
MODELLING AND  
REPRESENTATION**

# TASK FOR TODAY

1. Review a selection of students 'ElectroLiquid Aggregation' concepts:

“Why still speak of the real and the virtual, the material and immaterial? Here these categories are not in opposition, or in some metaphysical disagreement, but more in an electroliquid aggregation, enforcing each other, as in a two part adhesive.”

Lars Spuybroek, [1998] Motor Geometry, Architectural Design, Vol 68 No 5/6, p5

2. In 6x6 squares draw a series of 36 custom textures that represent the entire range from dark to light.

3. Inspired by your monuments at a macro scale create a series of smaller detail elements and add these to your monuments to reinforce/supplement the electroliquid aggregation that they represent.

Note: throughout the class pairs of students will be critiquing each others images from their Lumion environments and discussing how the landform is, or could be, demonstrating a distinctive and significant approach to bringing the clients together.

## **INDEPENDENT STUDY** Complete by Tuesday May 06 by 12am (midnight).

1. Apply a light, a medium and a dark texture to particularly significant surfaces within your monuments. Upload the entire set of 36 textures to your blog.

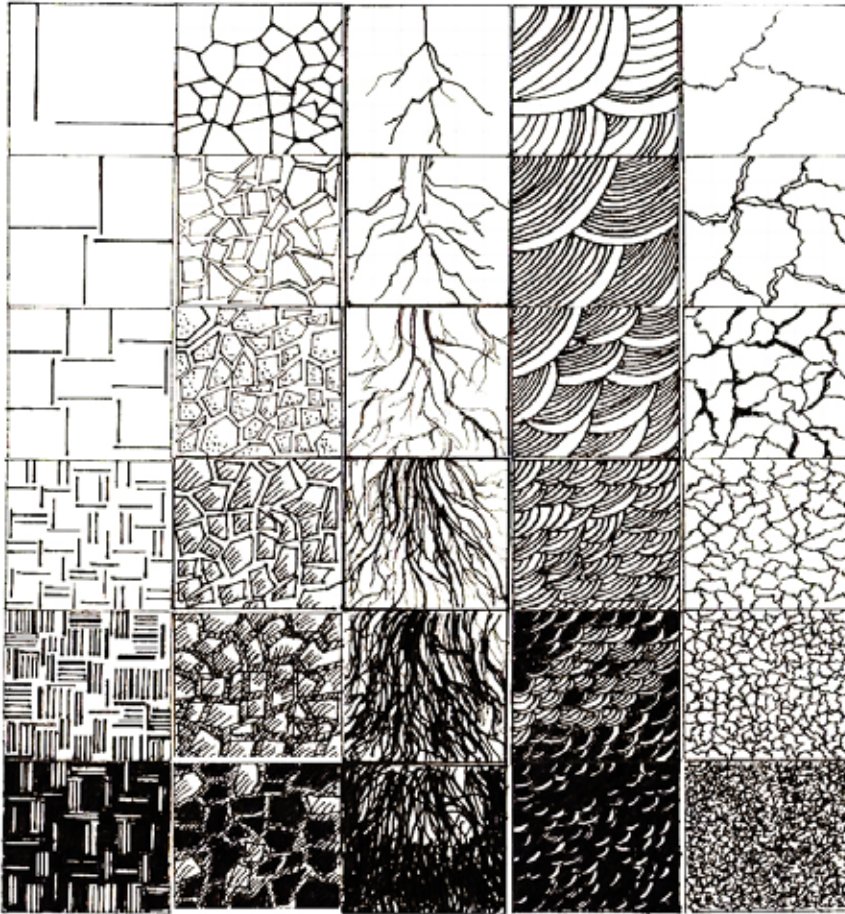
2. Continue to develop the landform, the monument and detail elements through to final resolution.

3. Use 'Fraps' to capture five images from your Lumion environment and upload them to your blog. We should be able to see your custom textures in at least 3 of the images. Write short comments (40 words max!) under 3 of the images to indicate how they relate to your "ElectroLiquid Aggregation" quote.

4. Upload your Lumion folder (located in your "my documents" folder) to your FileFront, Dropbox, or similar, user page and provide a link to them from your blog.

5. Upload your final version of the monuments to the SketchUp Warehouse and provide a link to them from your blog. to Google Warehouse and provide a link to them from your blog.

## WEEK 03 - Textures



**Above** are the **three main** textures I used.

**Light:** This was used for the whole entire building structure. For the main studios the exterior walls were large scaled when tiled to signify a rocky and marble terrain.

**Medium:** This was used for the stairs, to incorporate a treelike and also rocky look, and to blend with the environment.

**Dark:** This was used for the meeting square located in the middle of the structure. This shows a bold meeting space, with a granite or marble appeal to it, showing professionalism.

# JAMES IMPERIAL



**THE BLACK BOX  
BETWEEN ARCH  
DRAWING 1101  
MODELLING AND  
REPRESENTATION**

“Why still speak of the real and the virtual, the material and immaterial? Here these categories are not in opposition, or in some metaphysical disagreement, but more in an electroliquid aggregation, enforcing each other, as in a two part adhesive.”

Lars Spuybroek, [1998] Motor Geometry, Architectural Design, Vol 68 No 5/6, p5

Why still speak of the real and the virtual, the material and immaterial?

Because, as Robin Evans tells us (*The Projective Cast*, 1995), Architecture is limited by the forms of its representation that are available in any particular period ... and we are, in this particular period, at an advantage as we are living the transition from where there was clear distinction between the real and the virtual to a period where we may not be able to tell.

*The Black Box, The Concealed Room*

*Erika Kruger*

*Submitted for the Degree of Master of Design at Victoria University of Wellington, 2004*

A



B



C



D

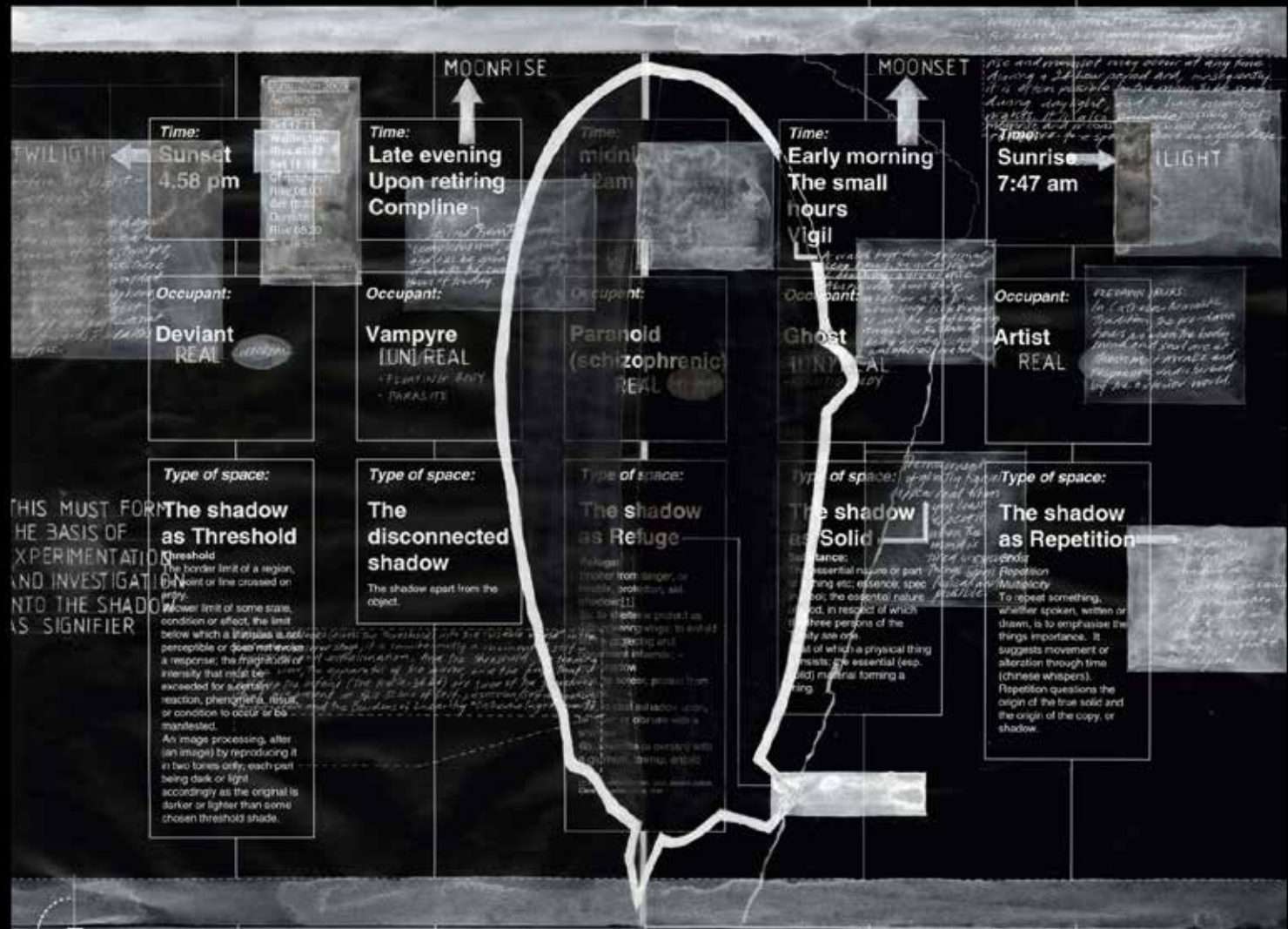


E













Vehicle:

Tomb of the Unknown

Vehicle:

Blimp  
Flight craft  
(India?)

Vehicle:

Submarine  
The coal bunker

Vehicle:

Memorial  
ground zero

Vehicle:

A House for Durer  
The Camera Obscura

Light source:

### Evening Civil Twilight

Twilight is the transition from day to night, and light to dark. As such it is a potent symbol...paintings of twilight evoked associations with the failure of the Enlightenment, the threat of barbarism, and preoccupation with death.<sup>[1]</sup> "For Caspar David Friedrich... twilight marked the ending of life's voyage"<sup>[1]</sup>

[1] Blüher, Andreas; Uppincott, Louise. *Light: The Industrial Age 1750-1930. Art and Science, Technology and Society*. Thames and Hudson, London, 2000, pg138

Light source:

### Clouded moonlight

*Handwritten text in the background of the 'Clouded moonlight' box, including phrases like "The moon is the most beautiful of all celestial bodies" and "The light of the moon is a soft and gentle glow".*

Light source:

### Moonlight

It folklore, the Full Moon brings about physical metamorphosis of all natural creatures. It is also the time when evil spirits, ghosts and evil forces roam the earth freely. At a basic level these superstitions about the Moon might have something to do with the way in which moonlight is different from daylight. The Moon's weak, silvery light obscures the perceived color relationships of objects, making things appear more monochromatic and more ethereal. Also, the shadows cast by the low hovering moon tend to be more dramatic than those cast by the Sun.<sup>[1]</sup>

[1] Uppincott, Louise *The Story of Light*. Merrell Foundation Publishers, London, 1999, page

Moon at East Quay, 2:43 am NZST  
<http://www.nzta.govt.nz>

Light source:

### Artificial lighting

Single point source, fluorescent bulb

the last fourth of the moon's period of revolution around the Earth

Light source:

### Morning Civil Twilight

Before sunrise and again after sunset there are intervals of time, twilight, during which there is natural light produced by the upper atmosphere, which does receive direct sunlight and reflects part of it toward the Earth's surface.<sup>[1]</sup>

<http://www.phoenixa130e.com/>

Colour:

grey

Colour:

red

Colour:

Black

*Handwritten text in the background of the 'Black' box, including phrases like "The darkness is not the lack of light" and "The sun is the source of all light".*

Colour:

white

Colour:

blue

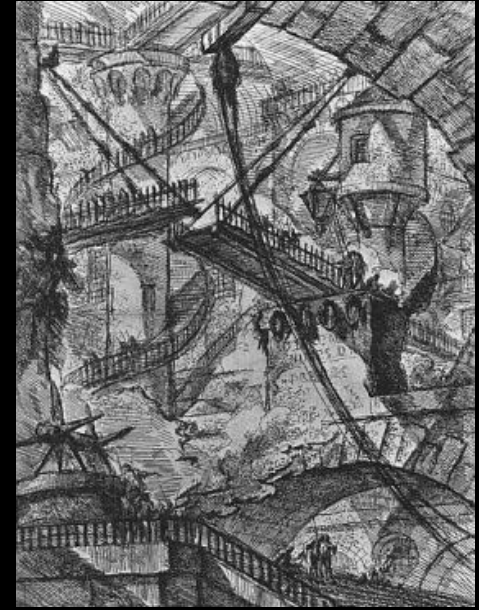




# 1. ANALOGY OF THE CAVE

*From*

**“Republic” by Plato**



# 2. CAMERA OBSCURA

*Translated from Italian:*

**veiled or concealed room**



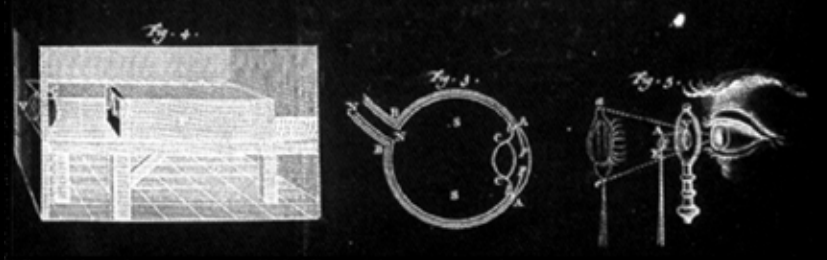
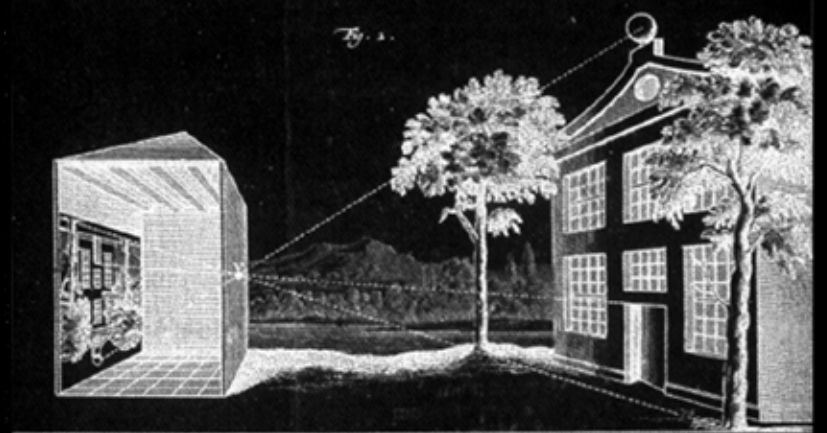
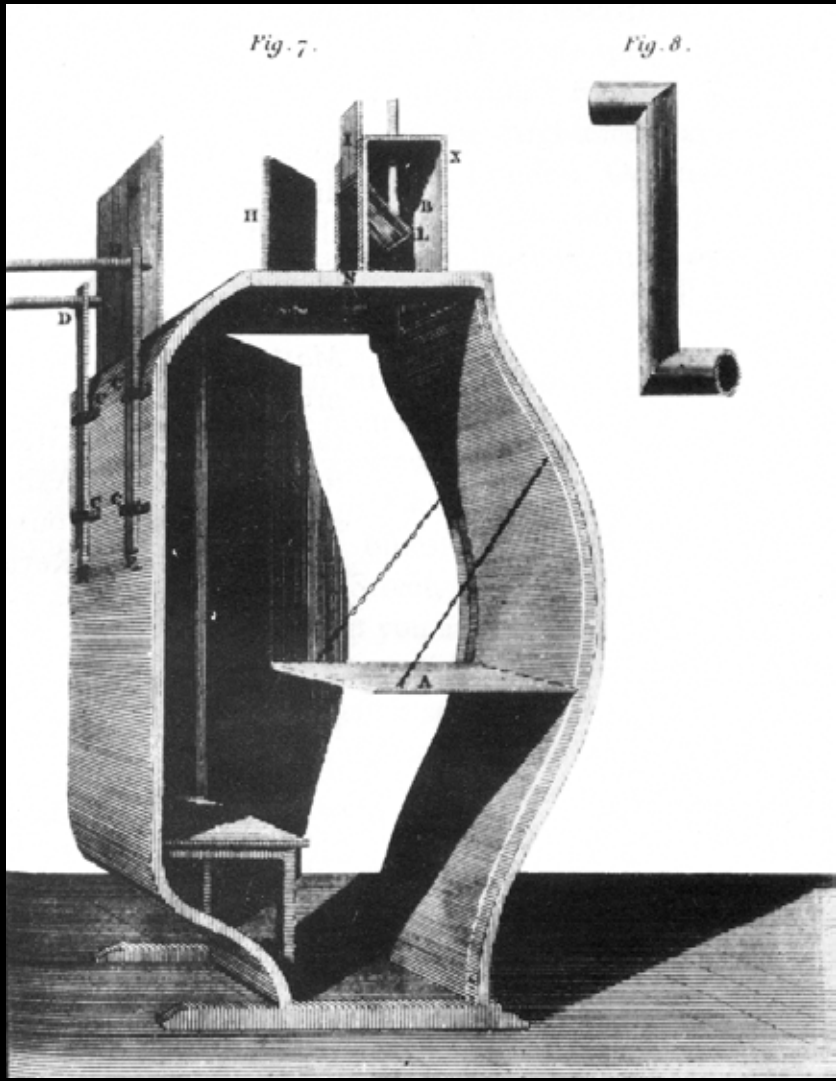


Fig. 7. CAMERA OBSCURA. B



J. Joffroy sculp.

# 3. THE INVENTION OF DRAWING

*From*

**“Natural History” by Pliny the Elder**



# 1. A SET OF BOOKS

The **5** shadow types established in the Matrix:

BOOK 0. Introduction

BOOK 1. The Shadow as Threshold

BOOK 2. The Disconnected Shadow

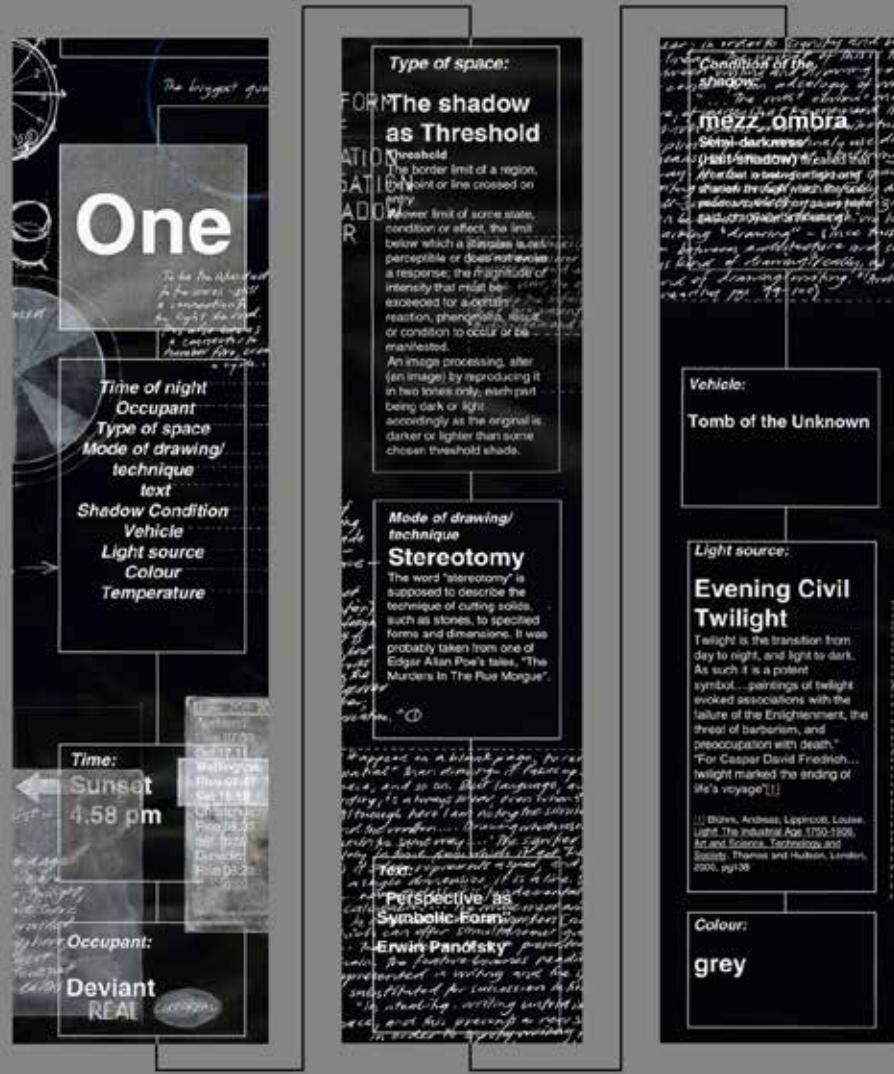
BOOK 3. The Shadow as Refuge

BOOK 4. The Shadow as Solid

BOOK 5. The Shadow as Repetition

# THE SHADOW AS THRESHOLD

PROJECT ONE  
THE SHADOW AS THRESHOLD



The criteria listed in the matrix are not explored as separate aspects of the shadow, but rather unite as distinct generative guidelines for the project. To see a full version of the matrix see book '0' of The Black Box, pg xxxvii, or visit: [www.theblackbox.co.nz/outline/](http://www.theblackbox.co.nz/outline/)

## SHADOW AS THRESHOLD

### The Shadow as Threshold

#### Threshold (thr<sup>ə</sup>ʃh<sup>ə</sup>ld, -h<sup>ɔ</sup>ld): n

1. *A sill of timber or stone forming the bottom of a doorway and crossing in entering a house or room.*
2. *The border limit of a region, the point or line crossed on entry.*
3. *A lower limit of some state, condition or effect, the limit below which a stimulus is not perceptible or does not evoke a response, the magnitude or intensity that must be exceeded for a certain reaction, phenomena, result or condition to occur or be manifested.*
4. *An image processing filter (an image) by representing it in two tones only, each part being dark or light according to whether the original is darker or lighter than some chosen threshold shade.*

Project One investigates the existence of shadow as threshold. Shadow threshold signifies a point of pause

The shadow threshold is a dichotomic place, being spaces between past and future, life and death, known and unknown. This space is shadowy because it is an unknown place, heterotopic, a veiled room, serving to obscure what is to come and concealing what has been. The shadow threshold veils both understanding of self and of the self's relationship to temporal and spatial boundaries.

<sup>1</sup> Pronunciation key: <http://dictionary.reference.com/> & v. "Threshold" referenced 24 January 2004.  
<sup>2</sup> Lester Kinsman, *The Shorter Oxford English Dictionary*, 2nd ed. (Oxford: Clarendon Press, 1902) s.v. "Threshold."

## SECTION ONE





3

### SHADOW AS THRESHOLD

As a voyeur she enjoys looking at for the 'other'. She is concerned with a reconciliation of the contradiction between "alienation and identification", and "identification not only with the ideal self but also, by extension, with other beings of whom the reflected image is a simulacrum.<sup>10</sup> She is not the keeper of the black box, nor the thresholds that are contained within. She is a momentary visitor, experiencing the space of the shadow threshold.

#### Time and shadow condition:

At precisely 4:58 pm<sup>11</sup> on the 21<sup>st</sup> of June 2003, the longest night of the year in Wellington, New Zealand, the voyeur enters the ~~space~~ <sup>threshold</sup> of the black box. At 4:58pm the light is fading from the evening sky. It is the light of mezz'ombra<sup>12</sup>, that area that is between light and shadow through which the one passes to the other, gradually diminishing little by little. It is the grey area, between recognition and anonymity.

*"Twilight is the transition from day to night, and light to dark. As such it is a potent symbol... paintings of twilight evoked associations with the failure of the Enlightenment, the threat of barbarism, and preoccupation with death... twilight marked the ending of life's voyage."<sup>13</sup>*

A physiological change takes place in perception of the voyeur. As darkness increases, the photosensitive rod receptors in the eyes take over from the cones. The rods control night vision, discerning only black and white. Rods are more sensitive to low light, but have lower acuity of vision than cones,<sup>14</sup> further depleting the level of detail she is able to witness.

<sup>10</sup> Clifton D. Bryant, *Sexual Deviancy and Social Prescription: The Social Context of Criminal Behaviour* (New York: Human Sciences Press, 1982), 101.

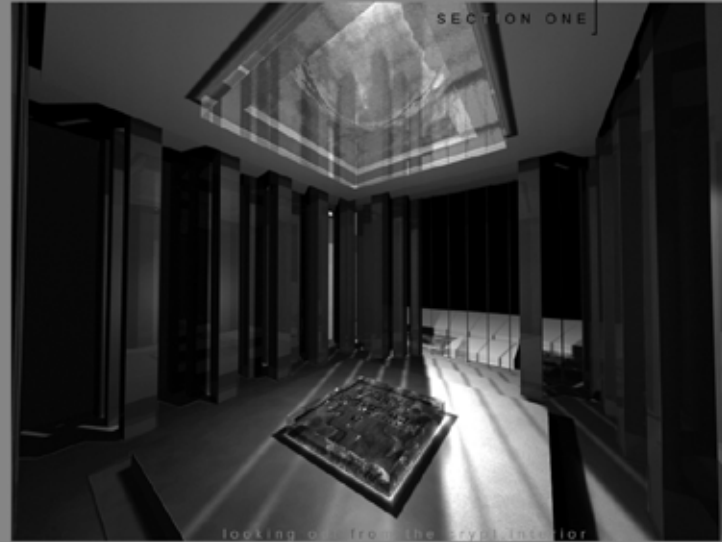
<sup>11</sup> Based in Wellington New Zealand, 21st June 2003.

<sup>12</sup> Weather Underground, Inc., "History for Wellington, New Zealand on Saturday, June 21, 2003." <http://www.wunderground.com/history/station/93436/2003/6/21/DailyHistory.html> (accessed 13 July 2003).

<sup>13</sup> "Mezz'ombra (mezz'ombra)" - It is called that area that is between light and shadow through which one passes to the other... gradually diminishing little by little according to the nearness of the object." E. H. Gombrich, *Shadow: The Depiction of Cast Shadows in Western Art* (London: National Gallery Publications, Distributed by Yale University Press, 1991), foreword.

<sup>14</sup> Andreas Blihm and Louise Lippincott, *Light: The Industrial Age 1750-1900*, Art and Science, Technology and Society (London: Thames and Hudson, 2006), 136.

<sup>15</sup> "The cones... are responsible for color vision and for seeing small details. The rods... are 'color blind' and are much more sensitive to low levels of light energy than cones, so they are responsible for night vision." Julian E. Houtberg, *Perception 2<sup>nd</sup> Ed.* (New Jersey: Prentice-Hall, 1978), 24-25.



## SHADOW THRESHOLD

The first threshold can best be described as an inverted threshold. Once inside this threshold the voyeur sees herself reflected in the mirror walls, multiplied, fragmented. Parts of adjacent walls are also bought through space and repeated on another plane. Nothing exists or happens in one part of the threshold that is not repeated in another part of the threshold. Every step, curve and path is reflected left to right, right to left, front to back, *and*

### the mirror

At each action is, "at once, that action and its mirror image, which poses the special dignity of images, and this awareness prevents (her) from succumbing for a single moment to chance and forgetfulness."<sup>31</sup> There is a fascination with the specular image. As the voyeur catches herself in different poses and movements along the path that is extended an impossible distance, she smiles, frowns, and laughs to see the reflection shadowing each move. However nothing that happens in the threshold is symmetrical. Every gesture and fragment of architecture is answered by gesture or fragment inverted, point by point.<sup>32</sup>

Privileging visual perception over the corporeal body, the mirror functions both as a window ~~following the voyeur's view~~ and a barrier, a wall, preventing access. Like Alice in front of the Looking Glass, lamenting her desire to see that which she cannot see in the mirror, that which she knows exists in reality but is beyond the site of the mirror.<sup>33</sup> The visual corridor contains secrets. Spaces are hidden from view, as only the planes of objects adjacent to the plane of the perspective grid are revealed; and the nature of the mirror disallows enlightenment of what is behind and beyond.

<sup>31</sup> Calvino, Invisible Cities (London: Vintage, 1997), 53.

<sup>32</sup> Calvino, 54.

<sup>33</sup> "There's the room you can see through the glass - that's just the same as our drawing room only the things go the other way. I can see all of it when I get up upon a chair - all but the bit just behind the fireplace. Oh, I do so wish I could see that bit!" Calvino, 54.

## SECTION TWO



## SHADOW AS THRESHOLD

A longing occurs, to breach the two-dimensional surface and occupy the inverted three-dimensional space beyond. The threshold is aspatial by its very nature, looking into the mirror that is a flat surface presents an image of "unsettling ubiquity and depth".<sup>34</sup> The mirror has prism-like qualities, disrupting the field of vision by hiding true space and revealing more at once; it is a point of separation between body and vision.

*"In Freudian theory the mirror represents the psyche. The reflection in the mirror is also a self-portrait projected on to the outside world. The placement of Freud's mirror on the boundary between interior and exterior undermines the status of the boundary as a fixed limit."*<sup>35</sup>

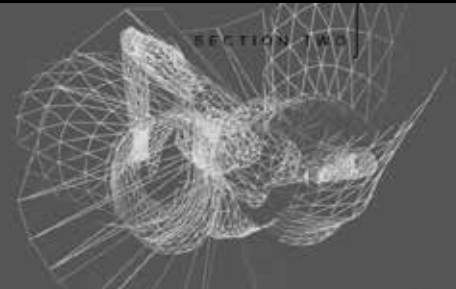
The threshold is a space of unknown limitations. It is a shadowy space, full of imitations and reproductions, removed from the "True Form".<sup>36</sup> "It negates the differences between front and back, between right and left, between bodies and intervening space ("empty space"), so that the sum of all the parts of space and all its contents are absorbed into a single "quantum continuum".<sup>37</sup>

<sup>34</sup> Melchior-Bonnet, 101.

<sup>35</sup> Beatriz Colomina, "The Split Wall: Domestic Voyeurism" in *Sexuality and Space*, ed. Beatriz Colomina (New York: Princeton Architectural Press, 1992), 96.

<sup>36</sup> Plato, "Book Seven" in *Republic*, ed. Tom Griffith, 225-258. (Great Britain: Wordsworth Editions Limited, 1997).

<sup>37</sup> Paroishi, 31.



SHADOW AS THRESHOLD

15.

All surfaces of the room are uneven, ~~made of disconnected~~ planes, and smaller surfaces ~~Shadows cast from the voyeur in the almost darkness touch and break up.~~ They are no longer a mere projection of the self, but appear to be made by some other, and move alongside the voyeur as something belonging to but separate from her.

Identification of the 'other' occurs in the shadow stage, whereas the mirror stage primarily involves identification of the 'I'. Mirror and shadow are optically and ontologically different: the shadow represents the 'other' stage, while the mirror represents the 'same' stage.<sup>44</sup>

*"Freud demonstrated that the duplication of the self was an essential ingredient in the production of the effect of 'the uncanny'...the double was an insurance against the destruction of the self, and 'energetic repudiation of the rule of death!'"<sup>45</sup>*

Her shadow-form is part body, cut and sectioned on various planes, given thickness, solidity by the ~~void~~ that fills the air, and disappearing into the darkness of other built surfaces. As she had watched her reflection in the mirror threshold, so she watches her 'other' in this chamber of shadows. Here she realises all shadows are not perfect and beautiful objects but belong to an object that casts it, a distortable extension of herself. Her position as voyeur is flipped as she becomes the subject of the gaze of the other.

the- is-a  
Each threshold is a point before enlightenment when all experience of past dictates the experience of the now. It is the moment before ~~understanding~~ *is gained*

<sup>44</sup> Stochita, 21-25.

<sup>45</sup> "There is a reversal that takes place in western representation that results in the demonisation of the shadow. 'At the end of the journey the 'demonisation' of the shadow and the 'immortalisation' it performs meet.'" Stochita, 132.

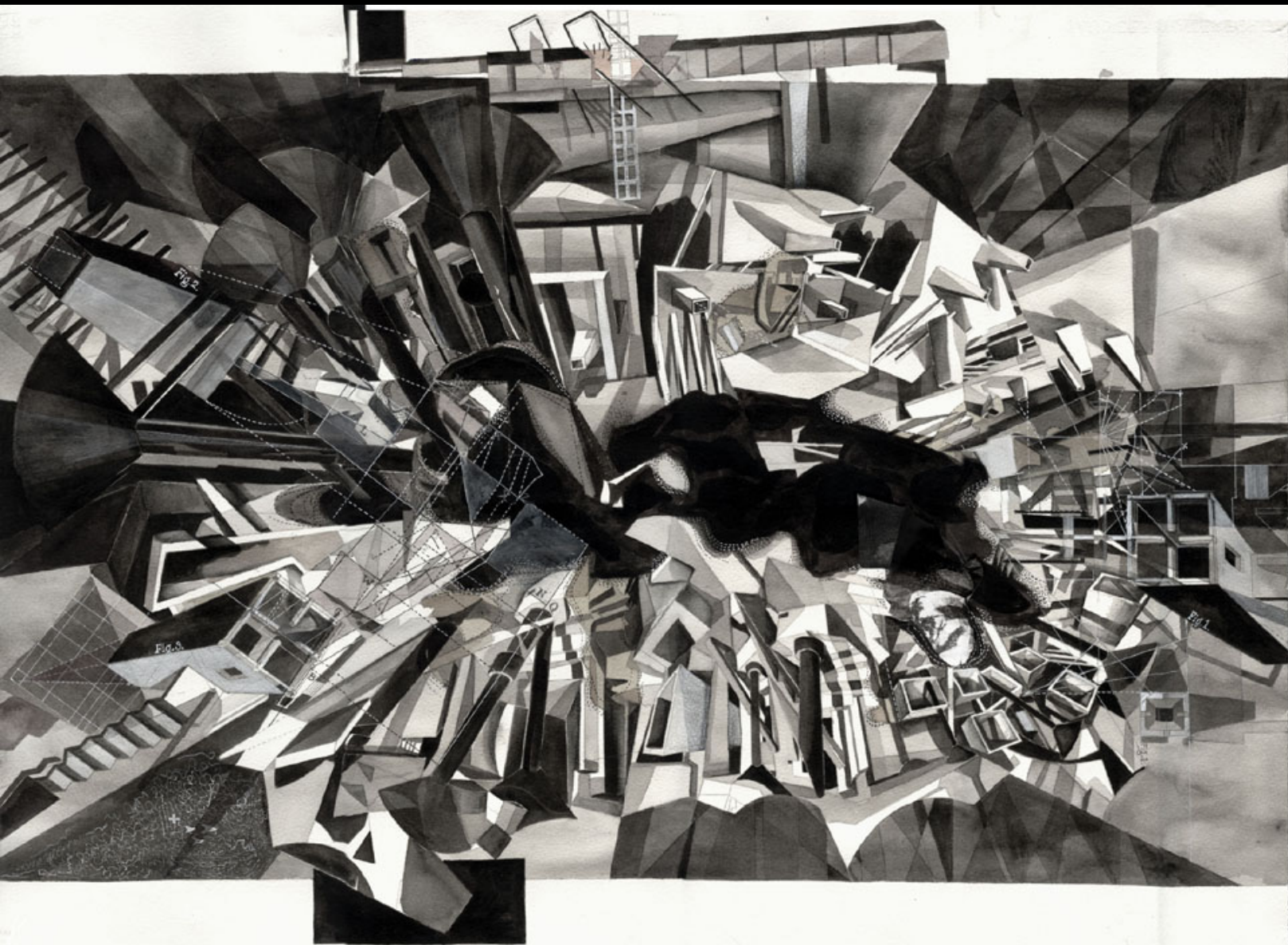
SECTION THREE

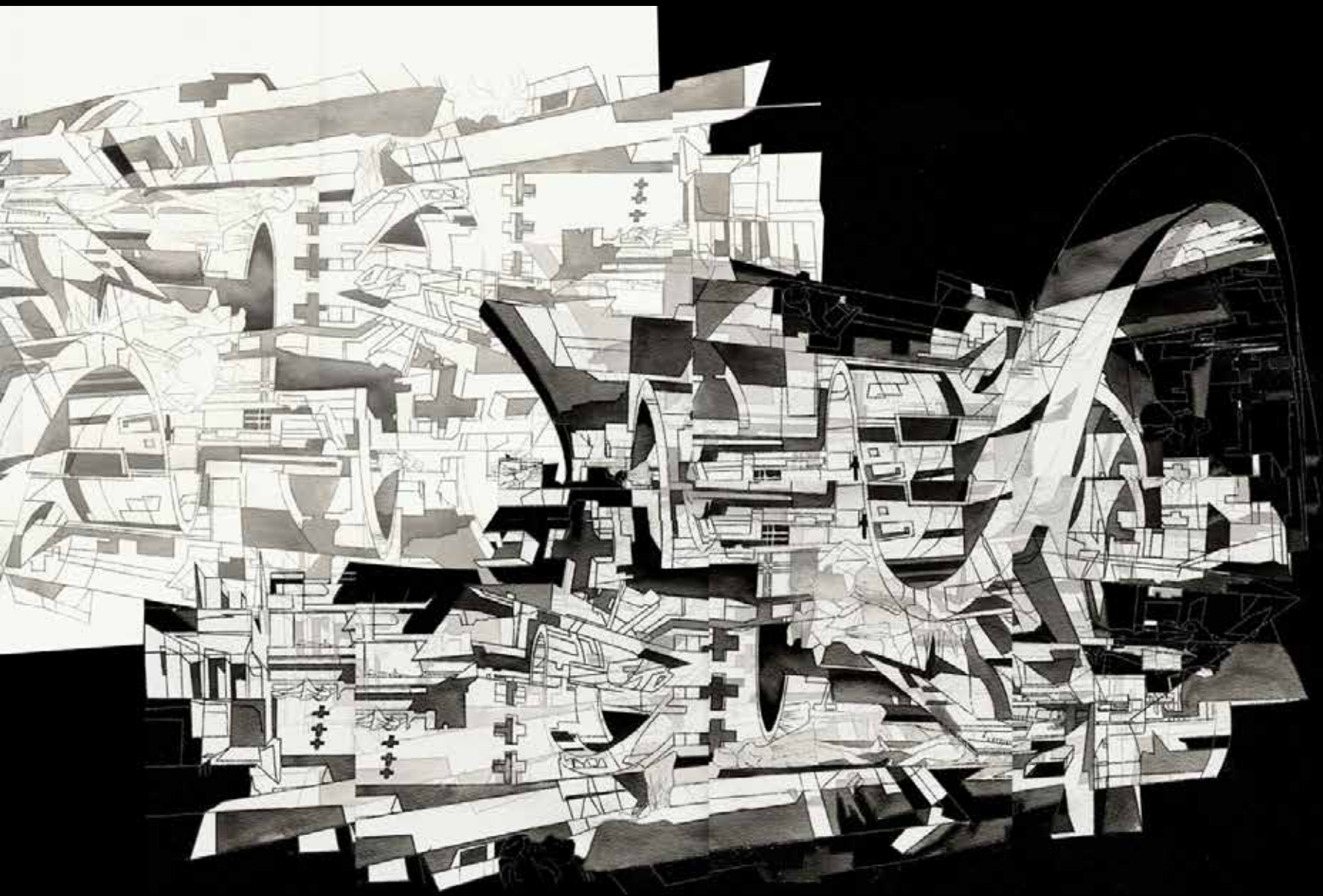


# FINAL DRAWINGS

Project 1







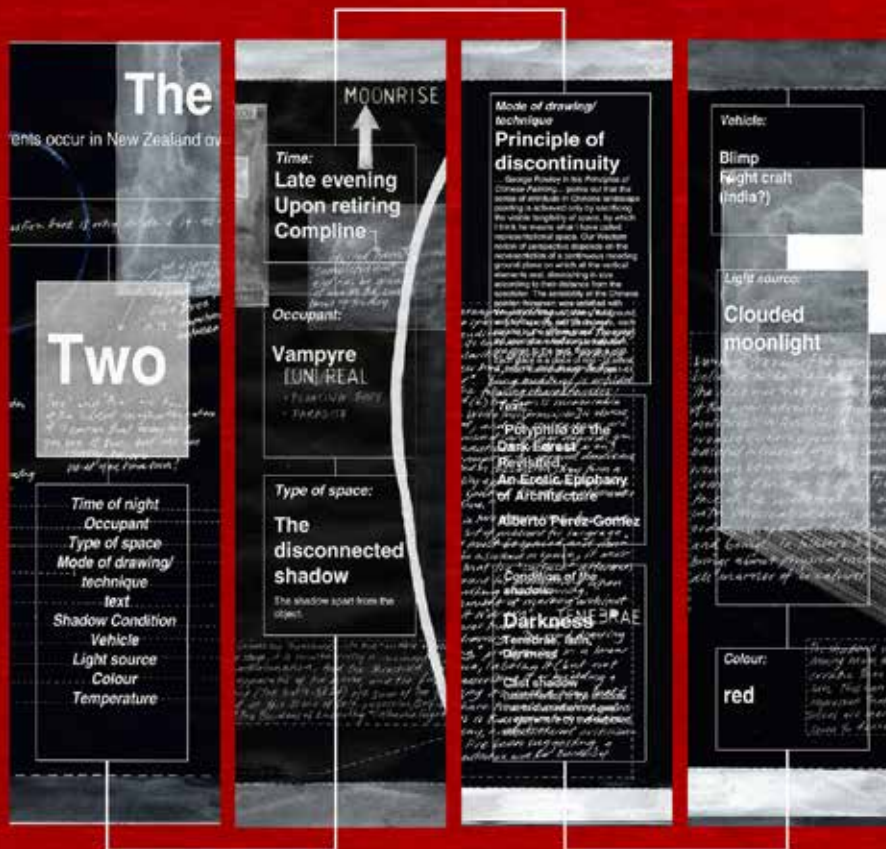
BOOK 2. **THE DISCONNECTED SHADOW**

**BOOK 2**



# The Disconnected Shadow

## Project 2

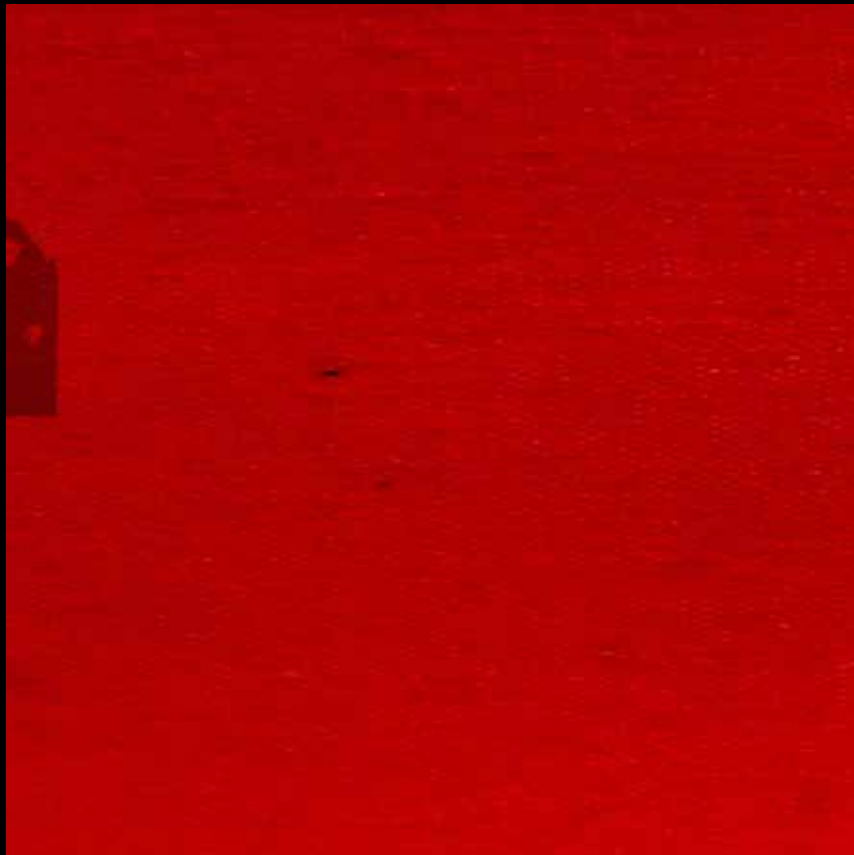


The criteria listed in the matrix are not captured as separate aspects of the shadow, but rather unite as distinct generative guidelines for the project. So see a full version of the matrix we took '0' of *The Black Box* by [www.theblackbox.co.nz](http://www.theblackbox.co.nz) or visit [www.theblackbox.co.nz/calline/](http://www.theblackbox.co.nz/calline/)



*The Disconnected Shadow  
The Disconnected Shadow*

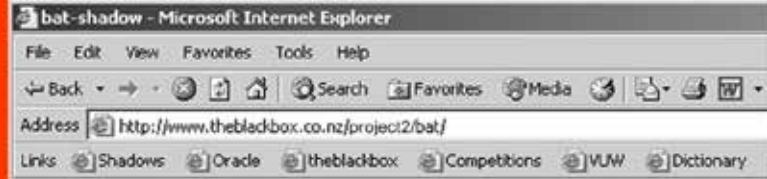
*Nosferatu, Murnau, 1922.*



*Process drawings*



*«...»*  
Victor I. Skolchita, A Short History of the Shadow (London: Reaktion Books, 1997), 170.



44



theblackbox

disconnected shadow

*www.theblackbox.co.nz/project2/bat/shadow.html the thing that (detach)!!*



45

*the being, arising identically. As loose your shadow is a symbolic to*  
\*Stouhita interrogates the illustrations of Adolf Schoder, Adolf Menzel and George Cruikshank for different scenes of "Peter Solter"





Lace laying

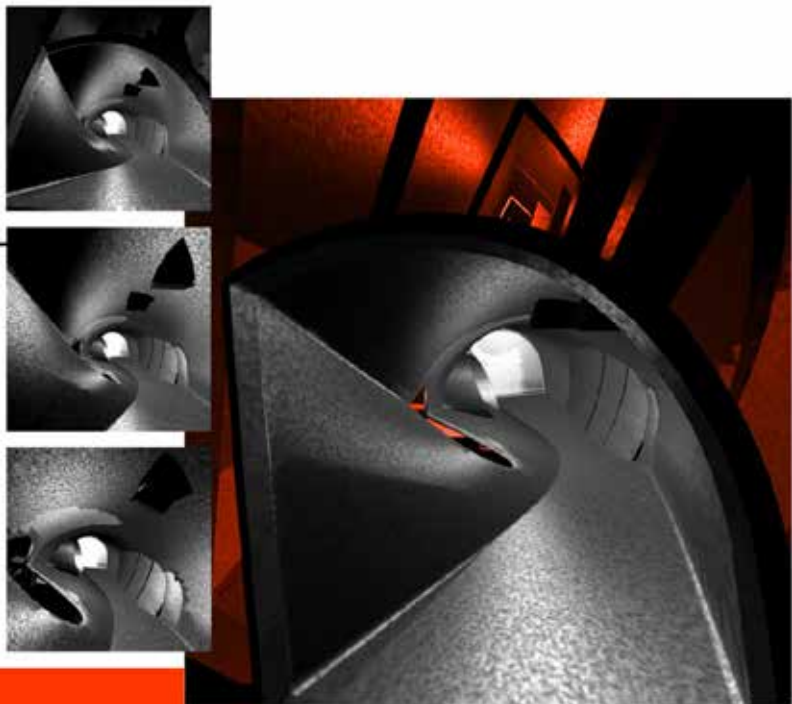
- Photo ...
- ...
- ...
- ...

... ..



... .. Physically I'm a mess, but your mind is in no shape either. The first thing you have to do is fix

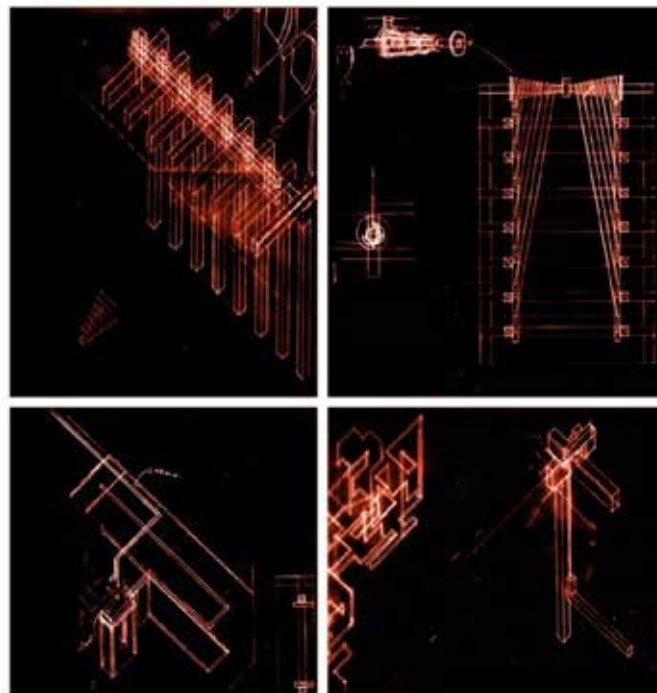
*process drawings*



60

*be strong when I do not know my own mind? I am lost.<sup>27</sup> The advantage/the hidden*

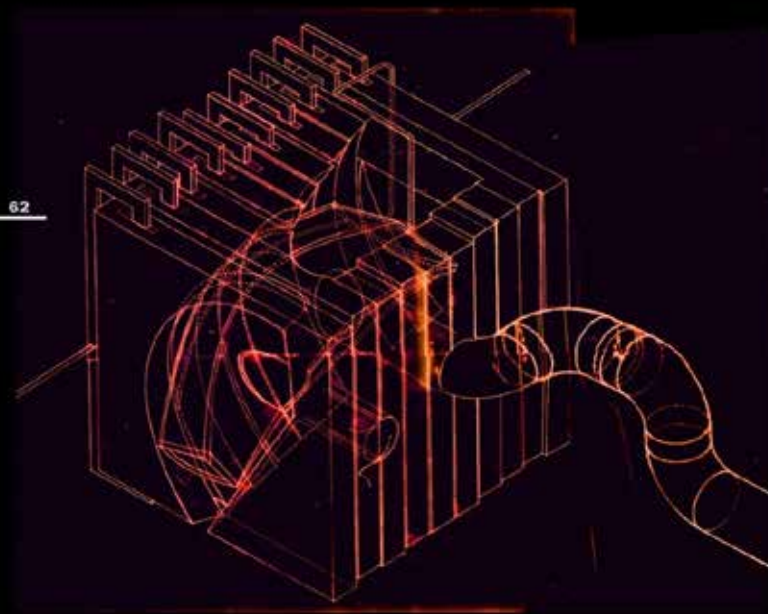
*process drawings*



61

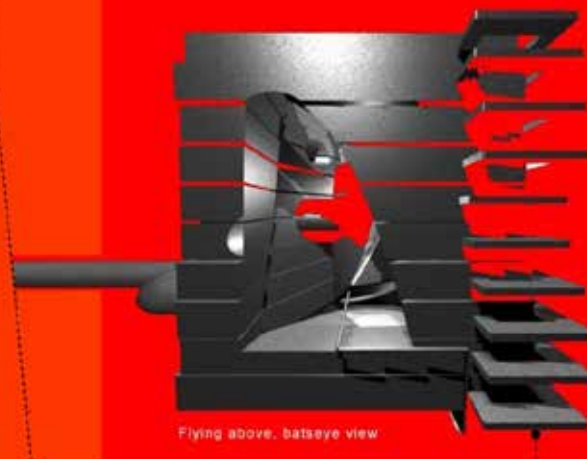
*has over the body is that it can take on forms that are impossible*





62

*for the solid body, the least and distast, and to take up properties*



Flying above, batseye view

63

*of that which it is cast upon; surely makes it a more adaptable th*

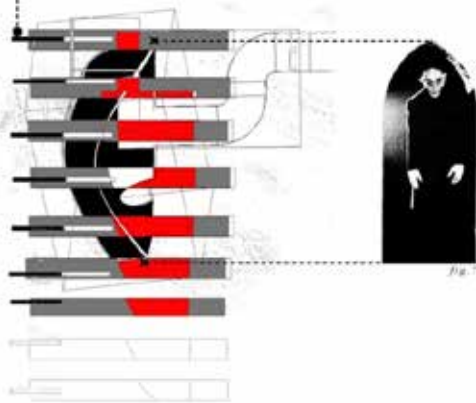
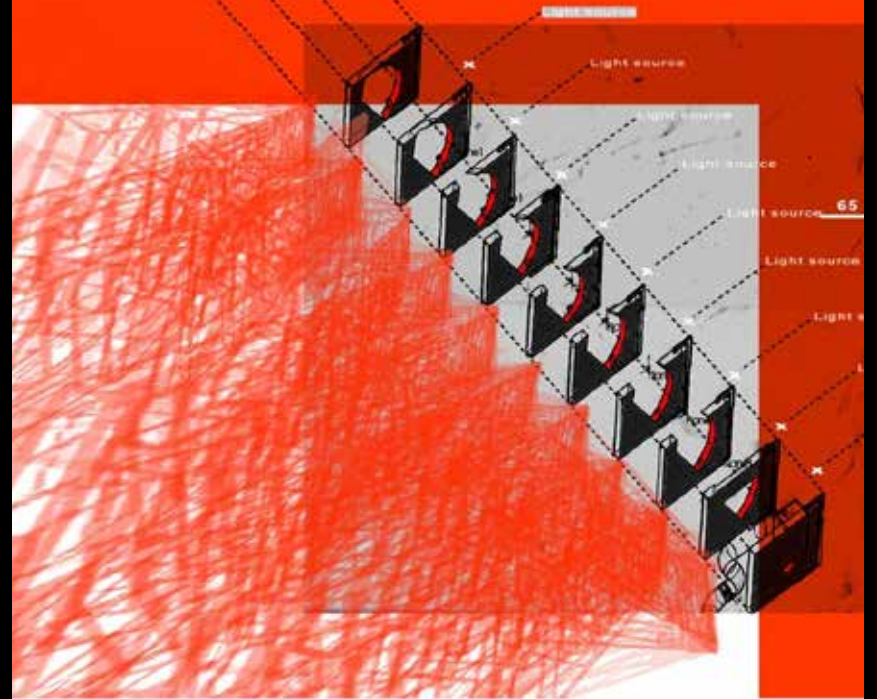


fig. 1

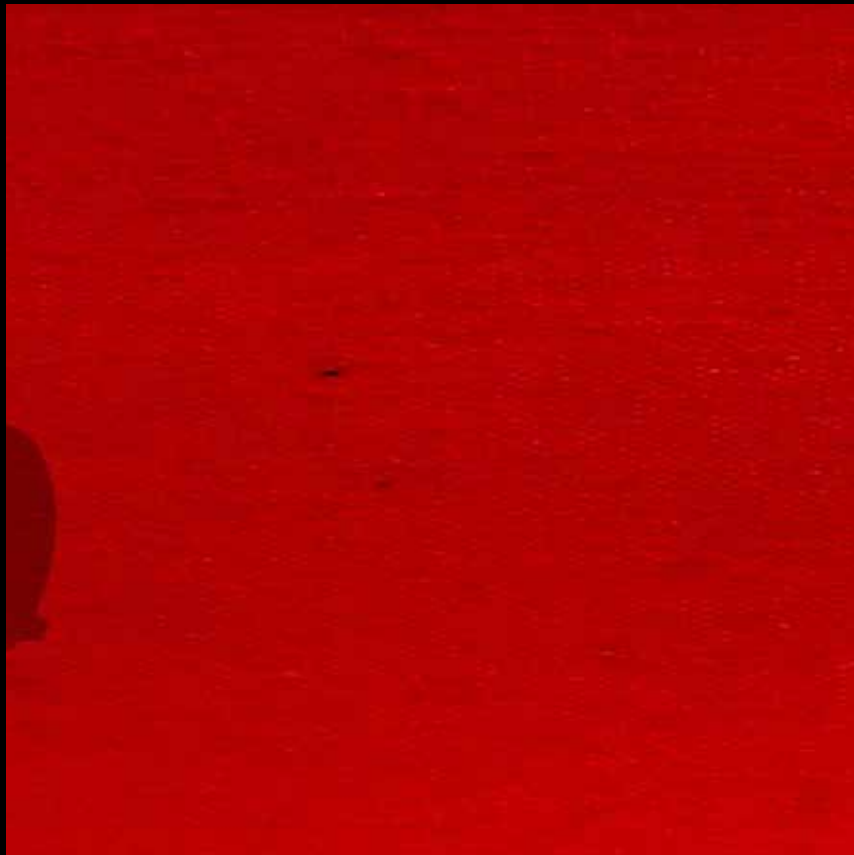
10. While the shadow unquestionably settles on the solid to make



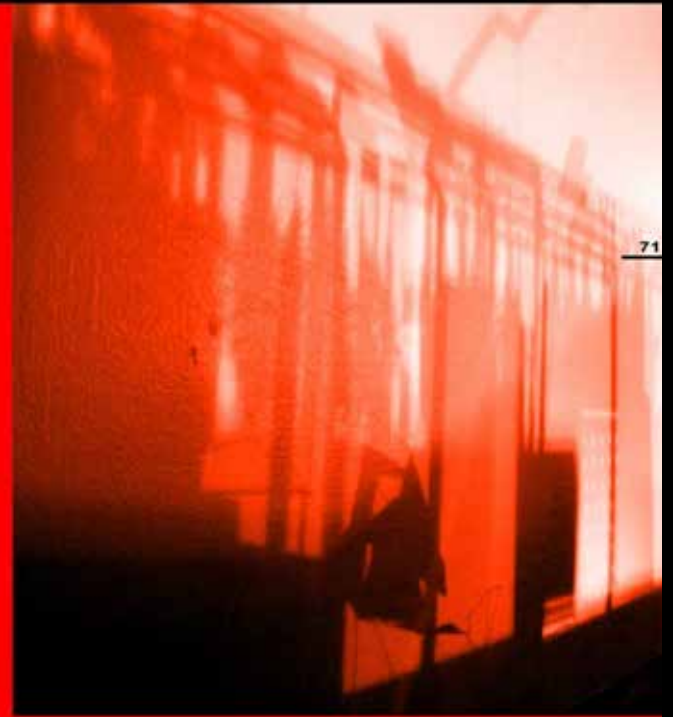
11. it is the solid that settles on the shadow to define it and give it

# FINAL DRAWINGS

Project 2



*Account 2*



71

*From the mid-afternoon of the shooting, we shook hands, on it, he knee'd down and I watched him go.*

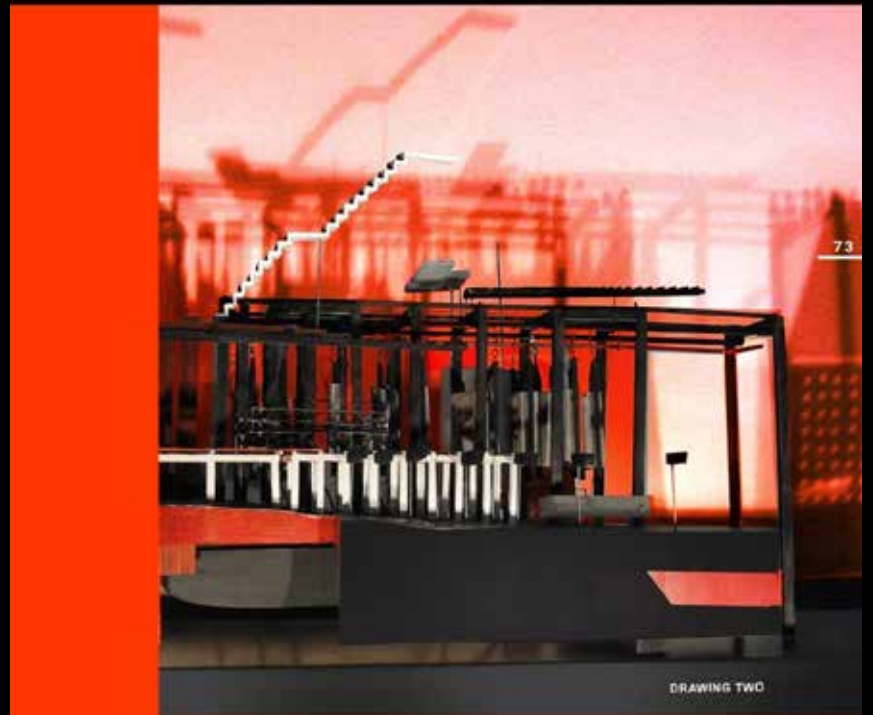
*drawing 2*



72

*In ascending plexicity, he silently detached my shadow from head to foot from the jaw; he lifted it up, peremptorily*

*drawing 2*



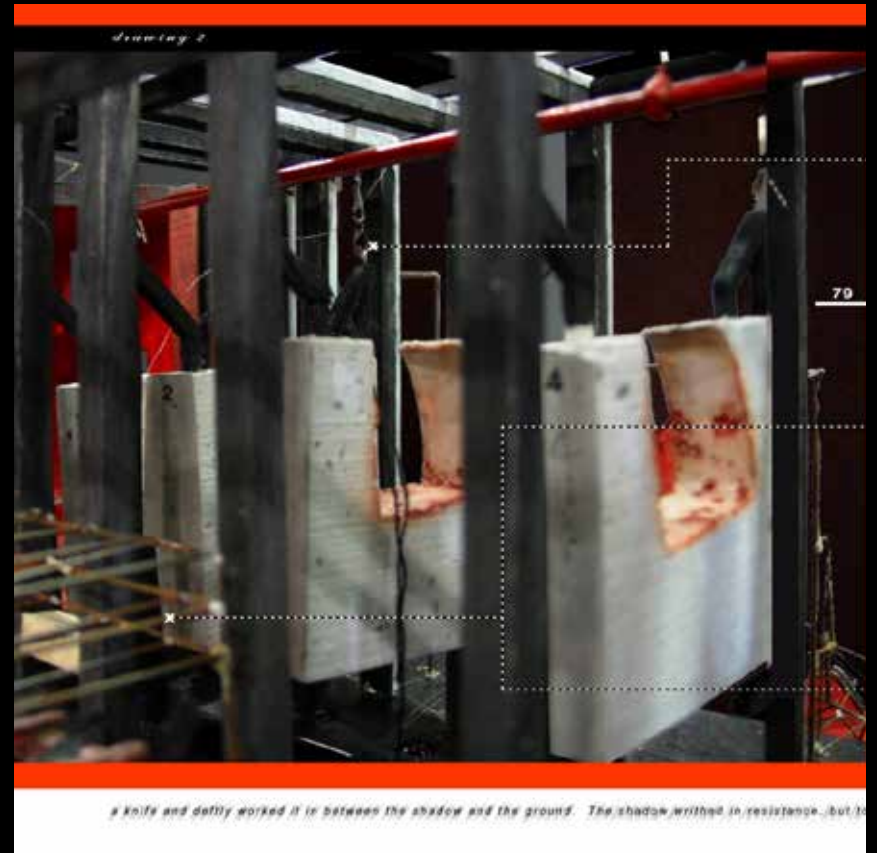
73

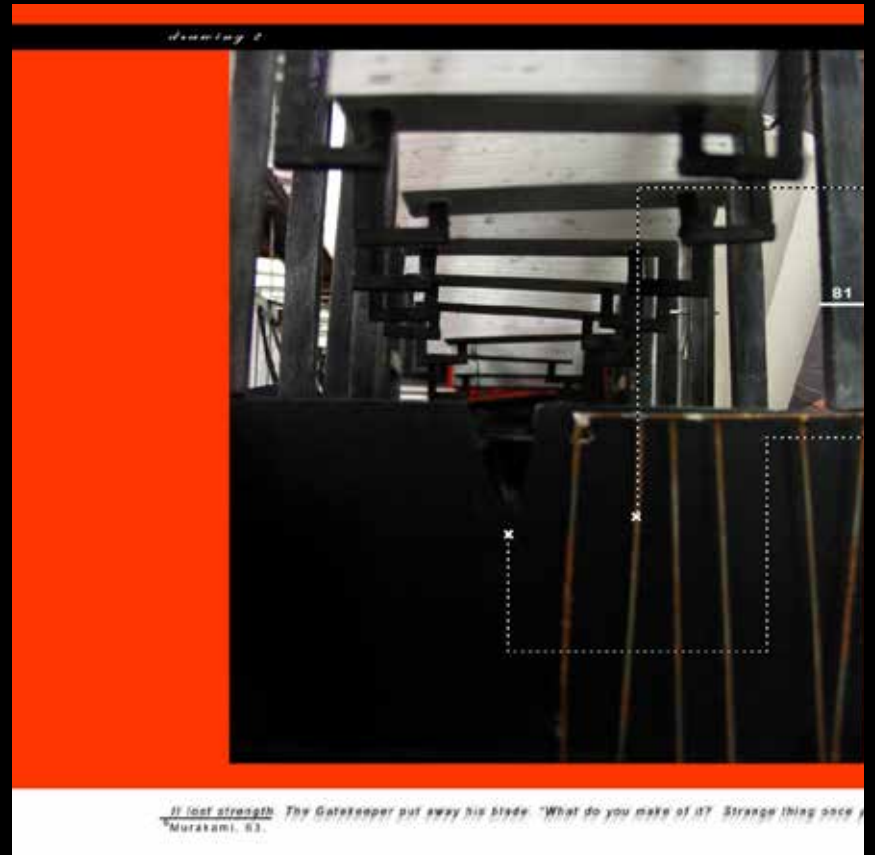
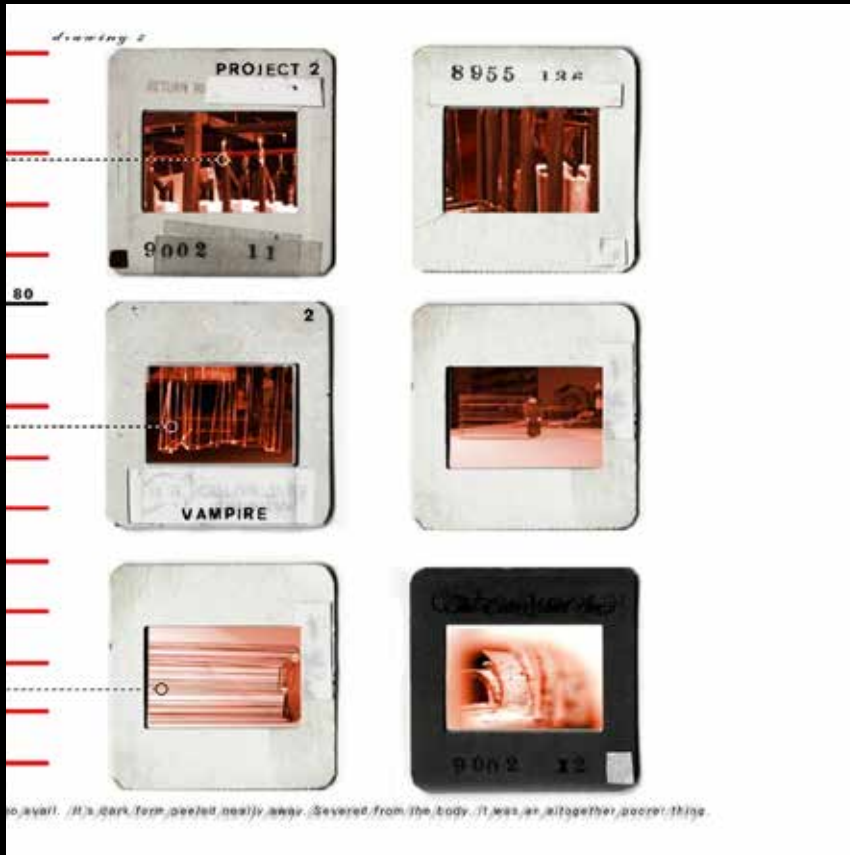
DRAWING TWO

*toiled it and finally got it from his bosom; the shadow of a bird descended at the first signal of  
Chamisso, 23.*









*drawing 2*



84

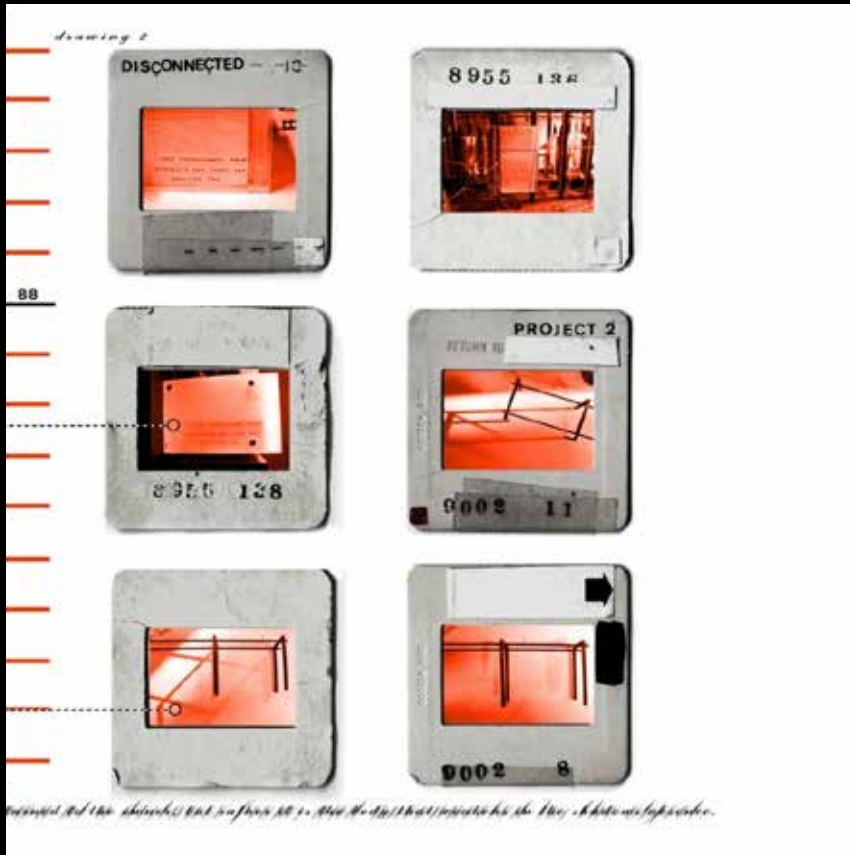


*... with exposure to light until eventually it disappears. The shadow will try*

*drawing 2*



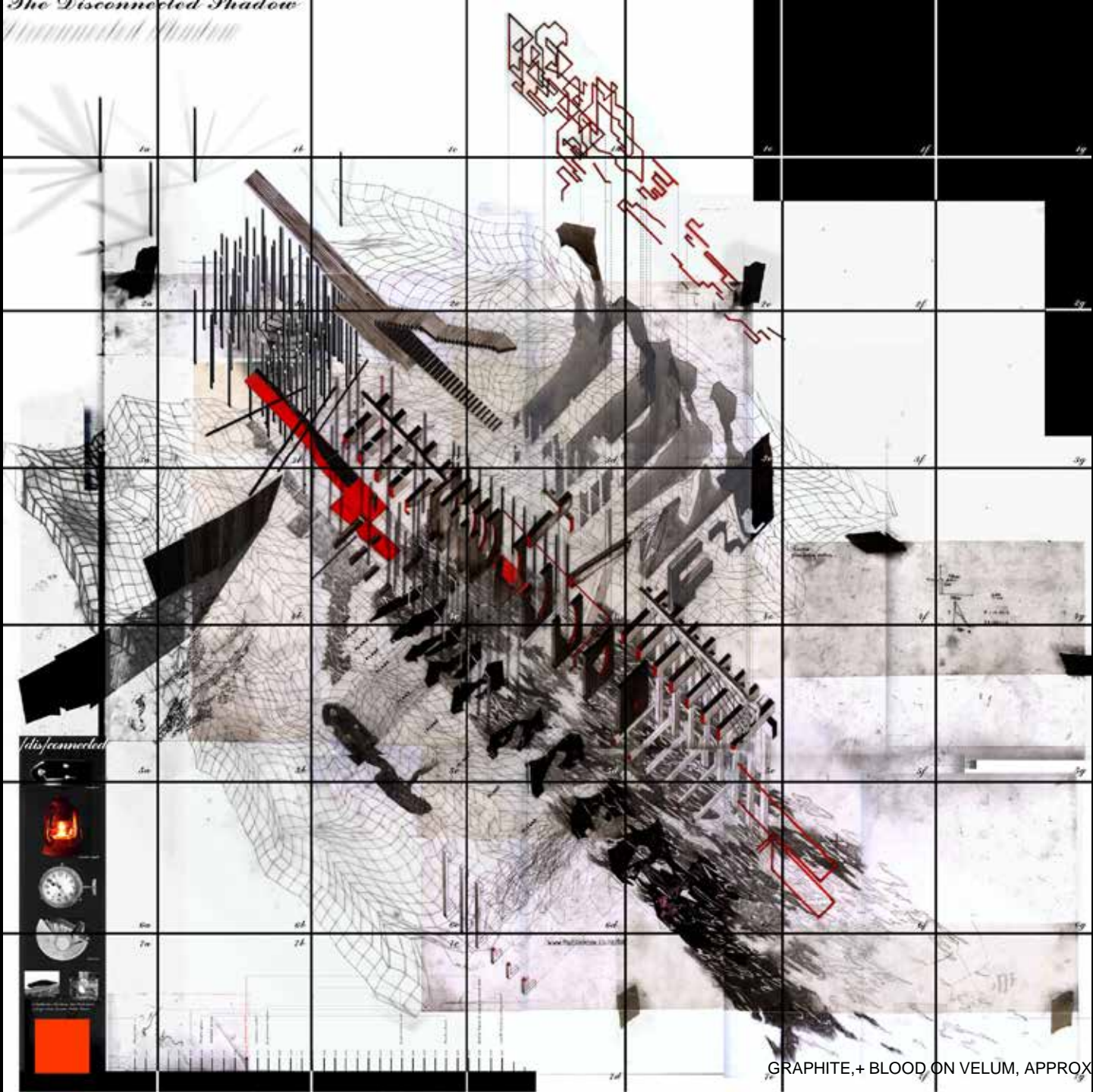
*.....*







*The Disconnected Shadow*



*It's connected*



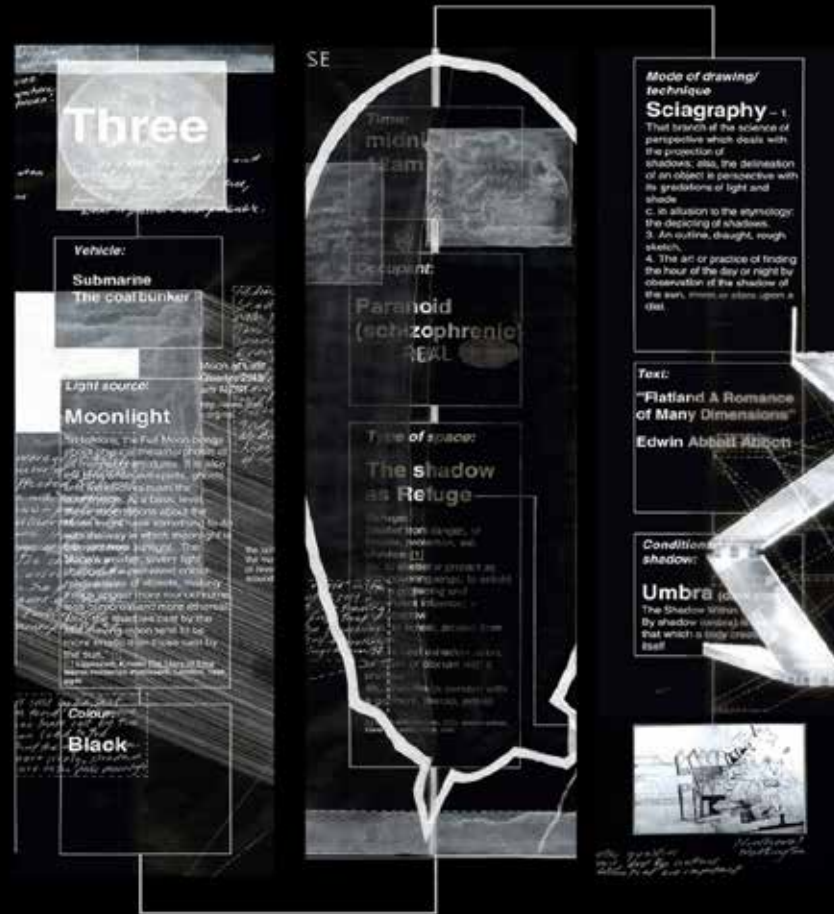
GRAPHITE, + BLOOD ON VELUM, APPROX

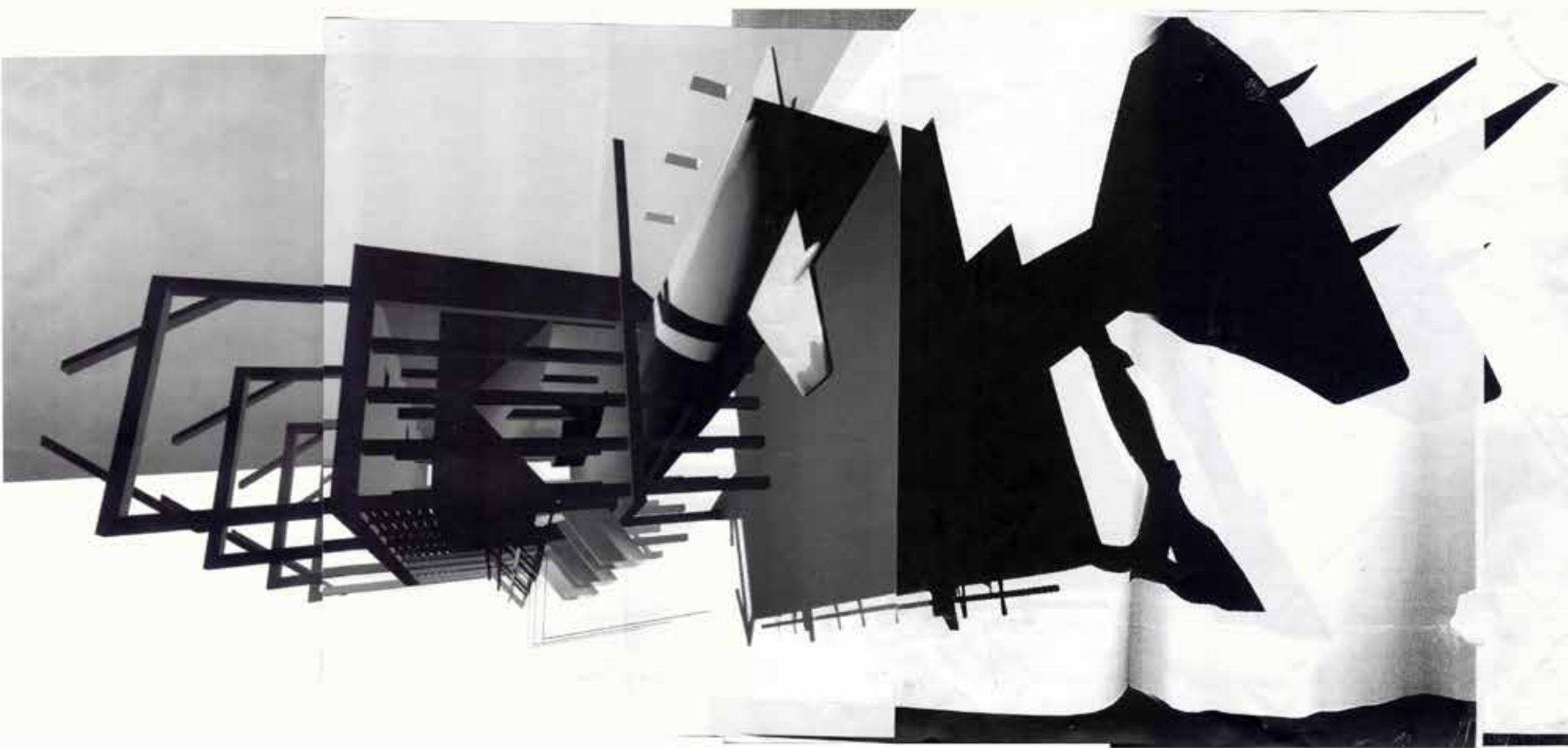
# SHADOW AS REFUGE

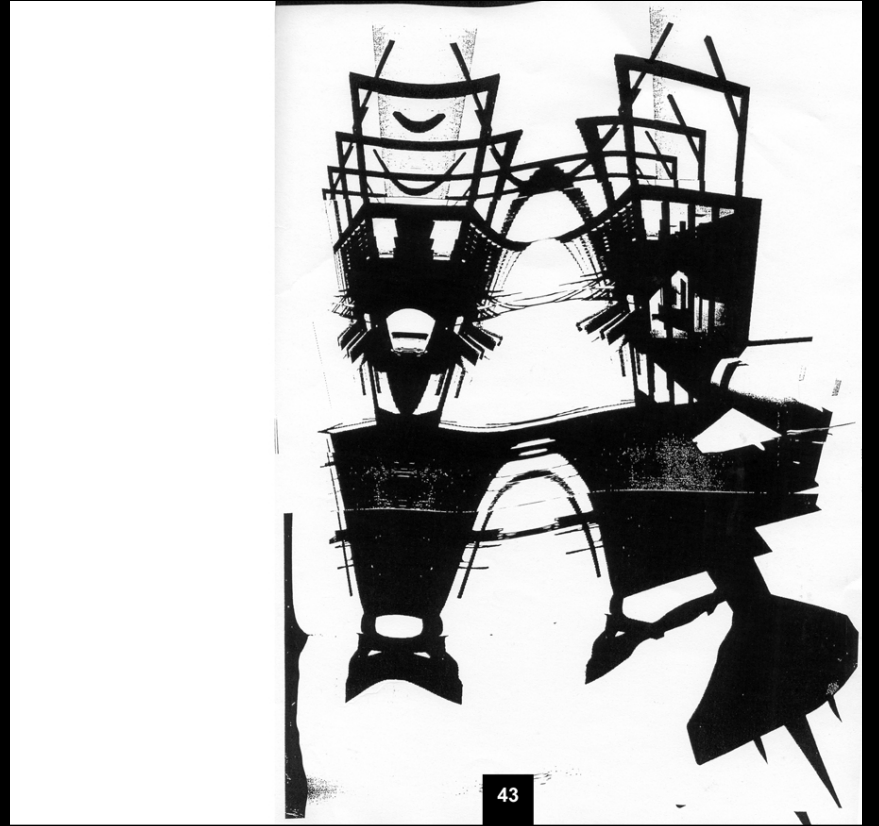
BOOK 3

# Project 3: The Shadow as Refuge

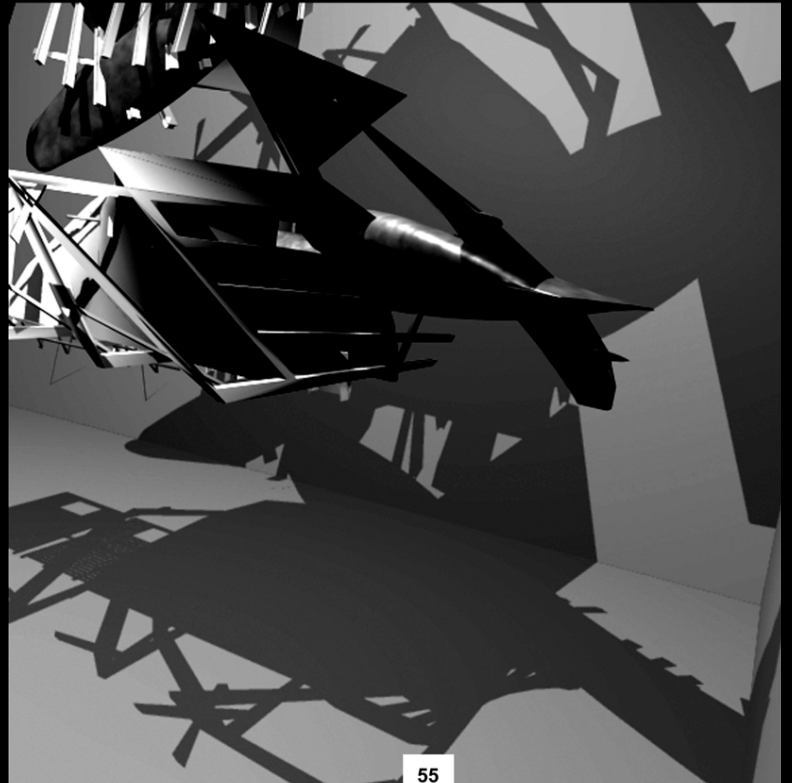
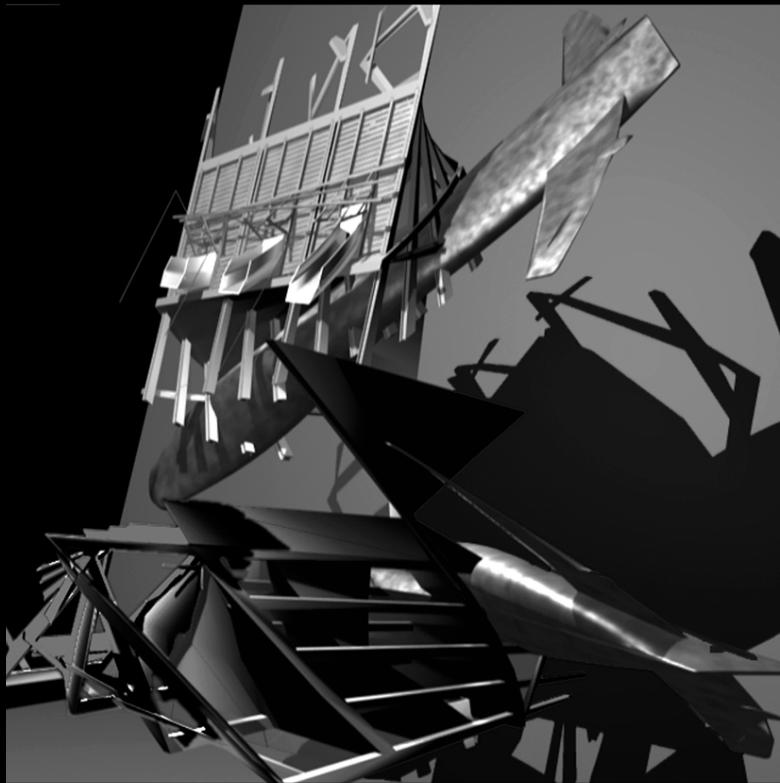
The criteria listed in the matrix are not explored as separate aspects of the shadow, but rather unite as distinct generative guidelines for the project. To see a full version of the matrix see book '0' of The Black Box, pg xxxvii, or visit [www.theblackbox.co.nz/outline/](http://www.theblackbox.co.nz/outline/)











# FINAL DRAWINGS

Project 3



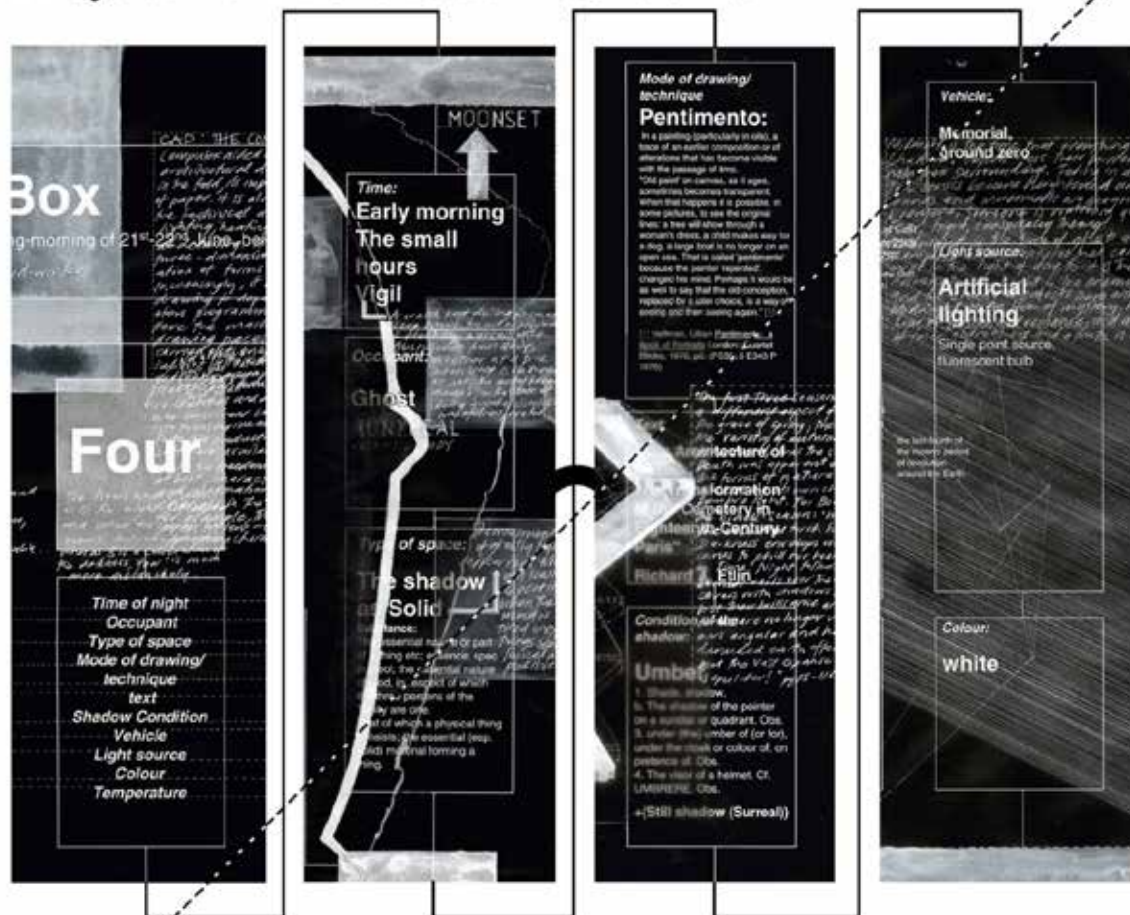


Play

**SHADOW AS SOLID**



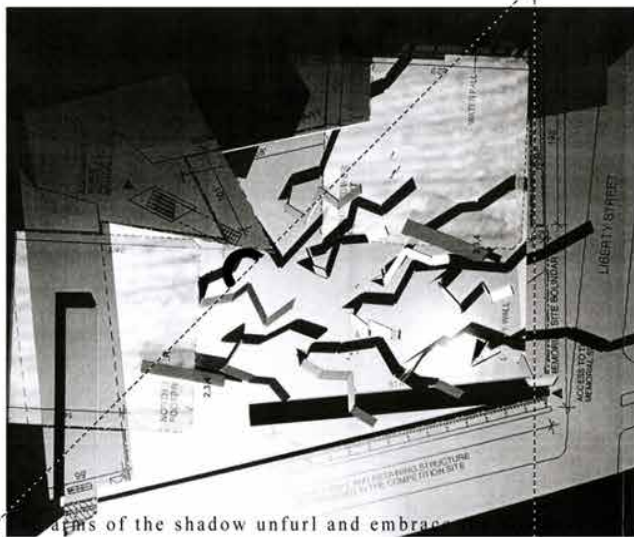
## Project 4: The Shadow as Solid



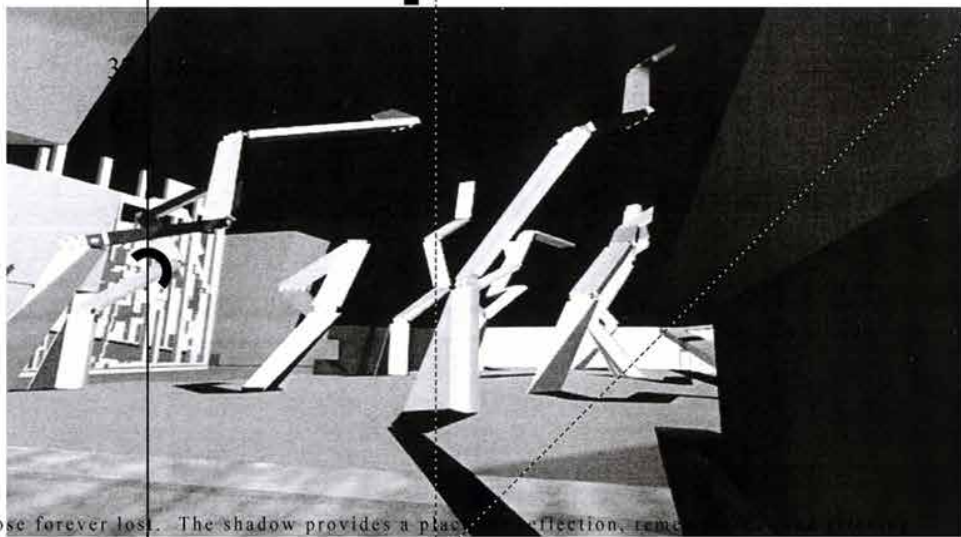
The criteria listed in the matrix are not explored as separate aspects of the shadow, but rather unite as distinct generative guidelines for the project. To see a full version of the matrix see book '0' of The Black Box, pg xxxvii, or visit [www.theblackbox.co.nz/outline/](http://www.theblackbox.co.nz/outline/)

# FINAL DRAWINGS

Project 4

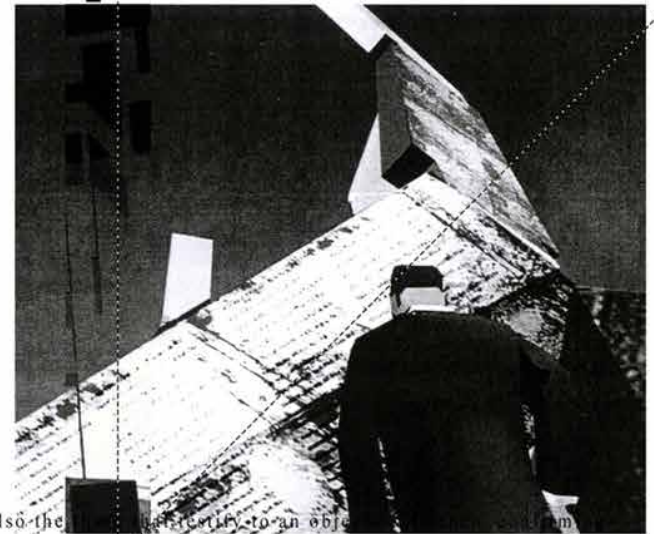
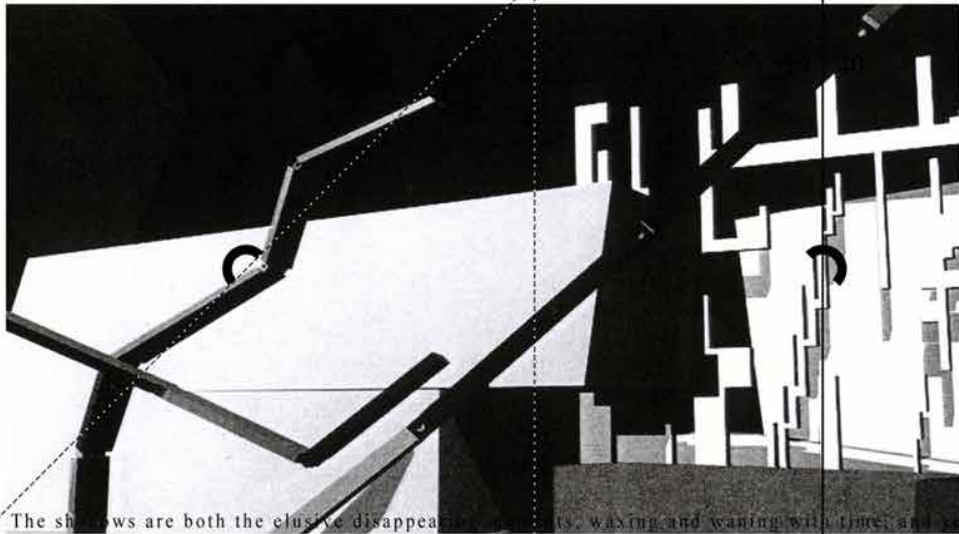


Forms of the shadow unfurl and embrace



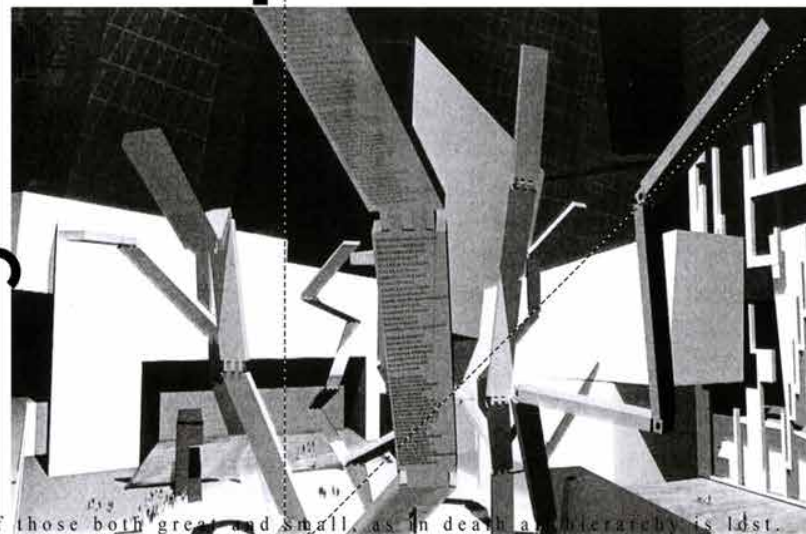
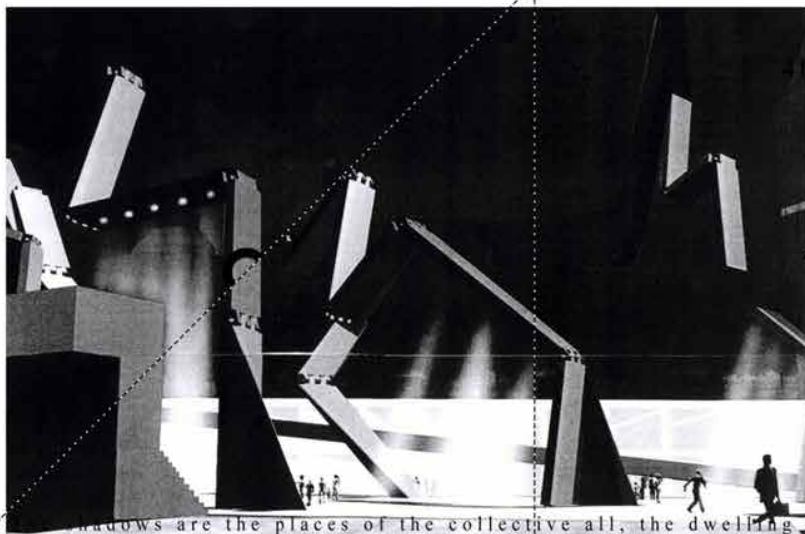
those forever lost. The shadow provides a place of reflection, remembrance





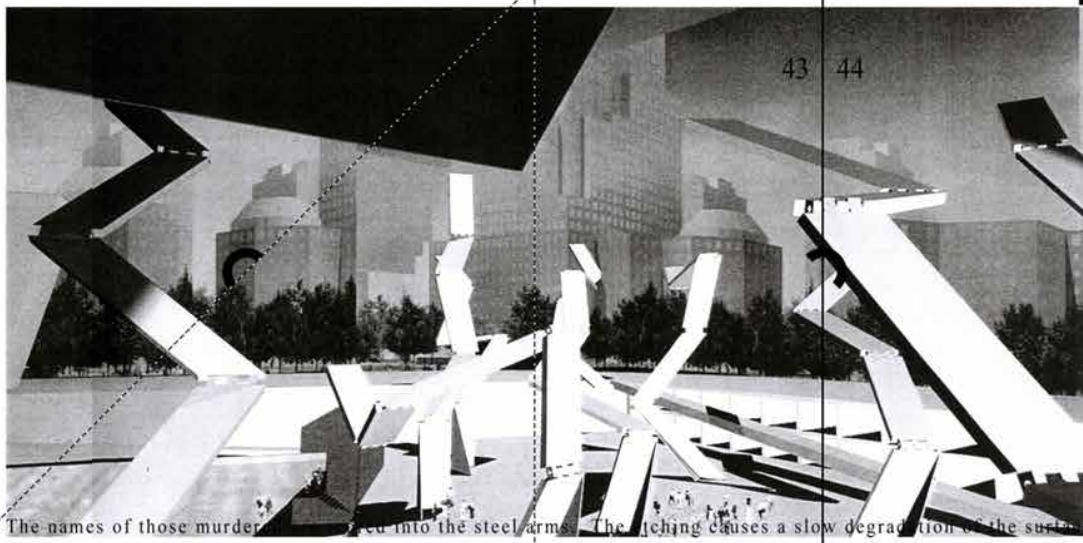
The shadows are both the elusive disappearance of objects, waxing and waning with time, and yet also the way they testify to an object's form.





Shadows are the places of the collective all, the dwelling of those both great and small, as in death a hierarchy is lost.





The names of those murdered are engraved into the steel arms. The patina causes a slow degradation of the surface until the outlines of the names appear only in light.



# SHADOW AS REPETITION

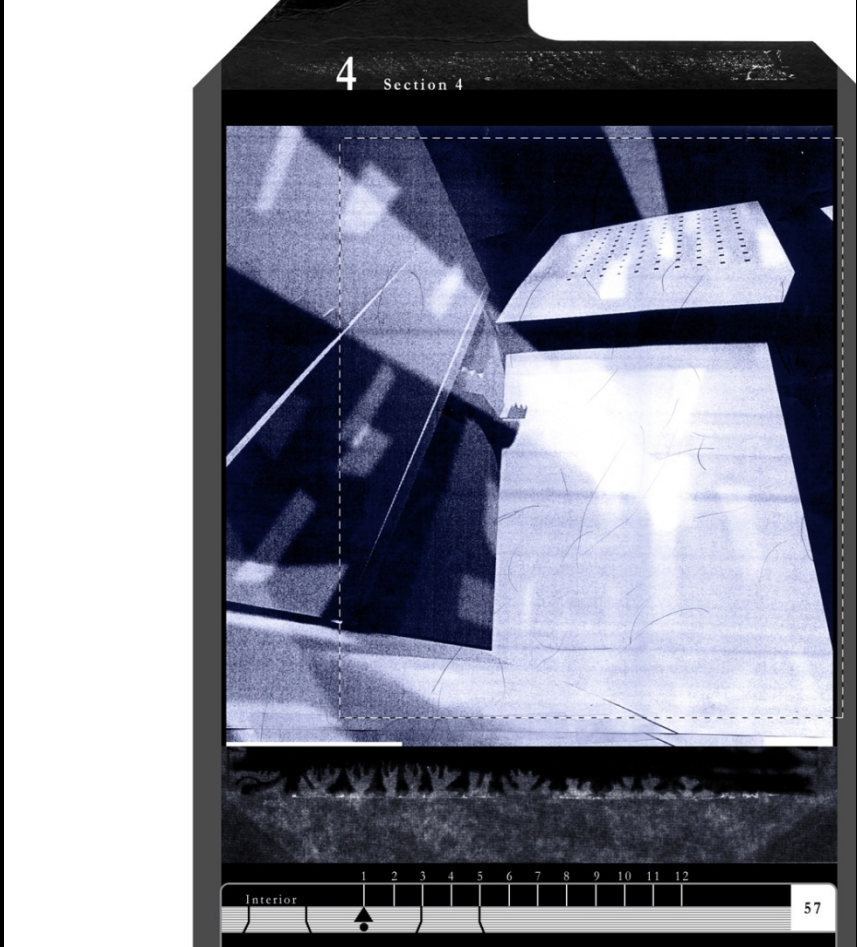
# BOOK 5

# The Shadow as Repetition

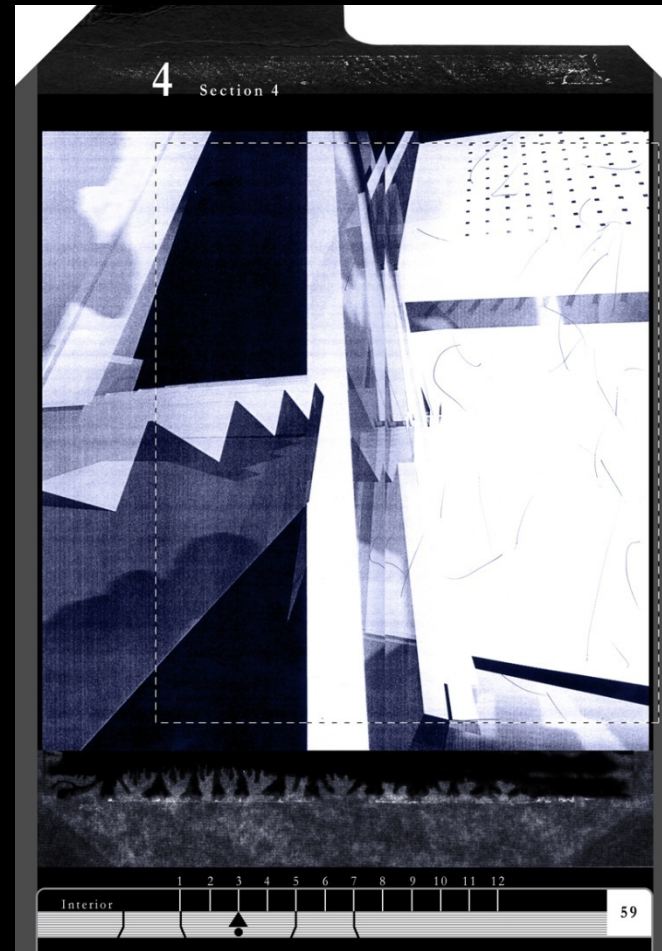
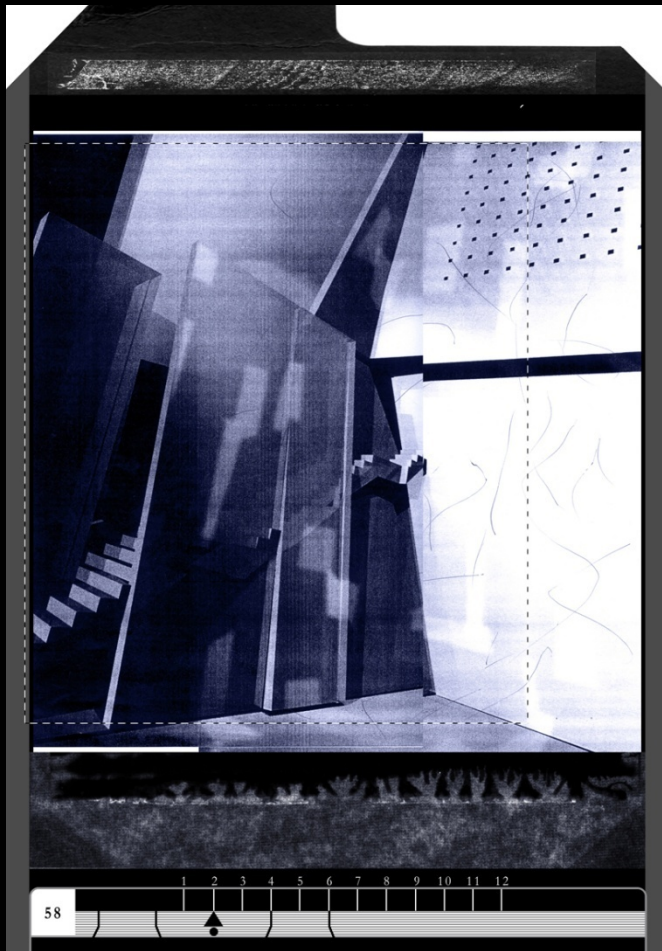
## Project Five



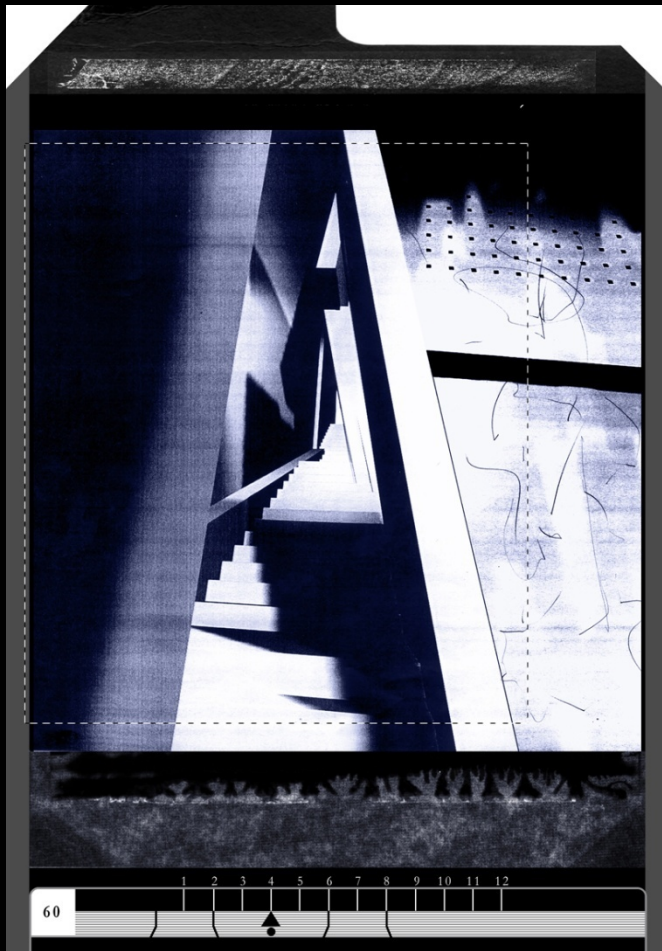
The criteria listed in the matrix are not explored as separate aspects of the shadow, but rather unite as distinct generative guidelines for the project. To see a full version of the matrix see book '0' of The Black Box, pg xxxvii, or visit [www.theblackbox.co.nz/outline/](http://www.theblackbox.co.nz/outline/)

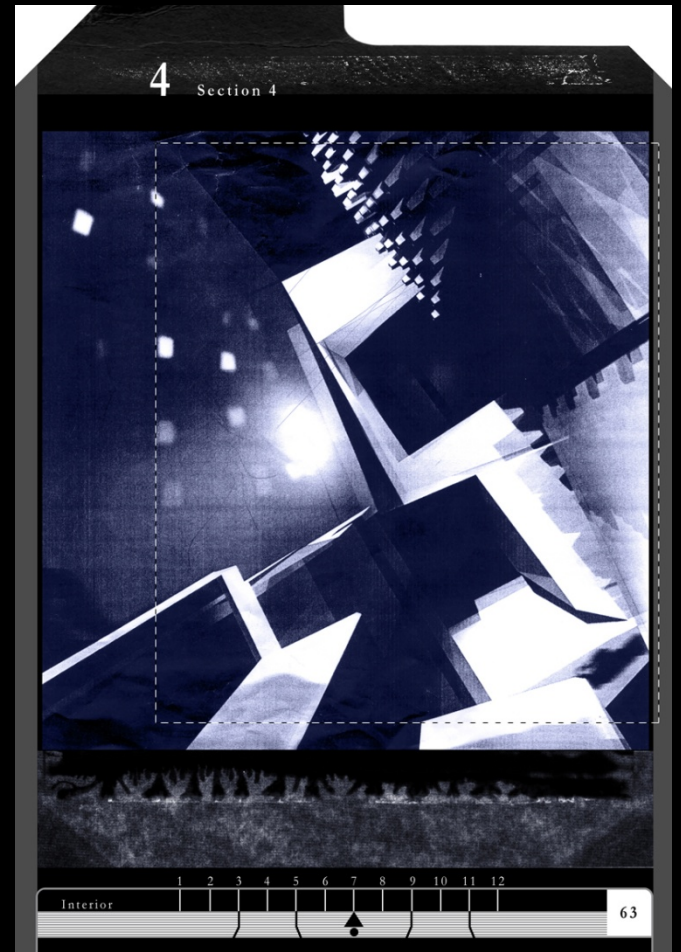
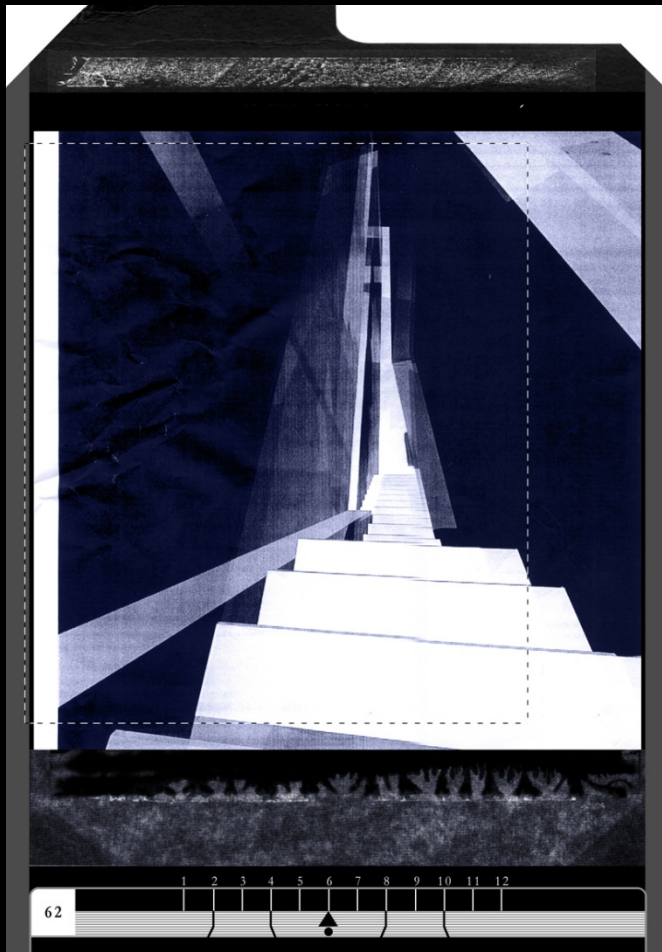


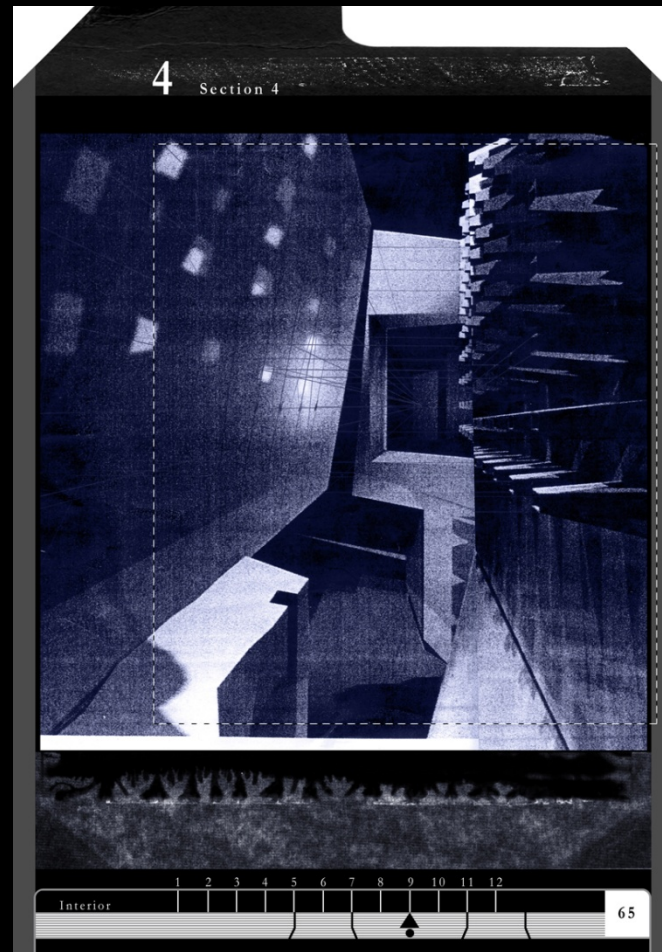
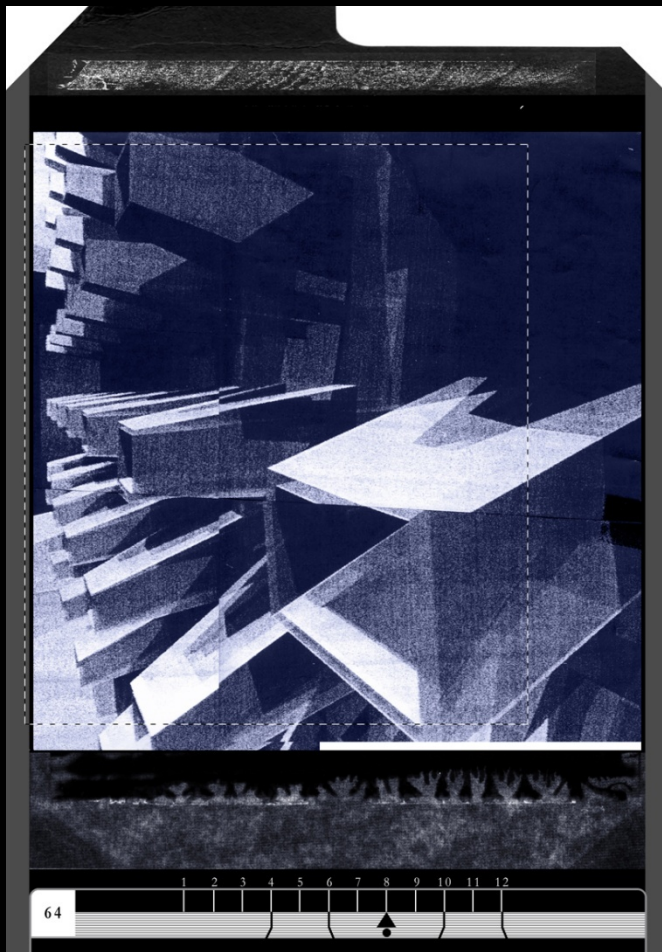




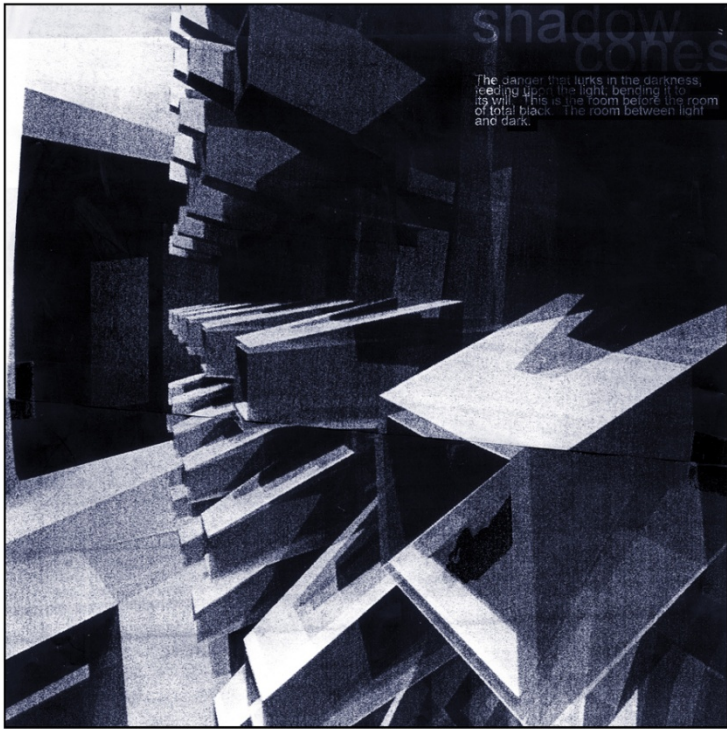








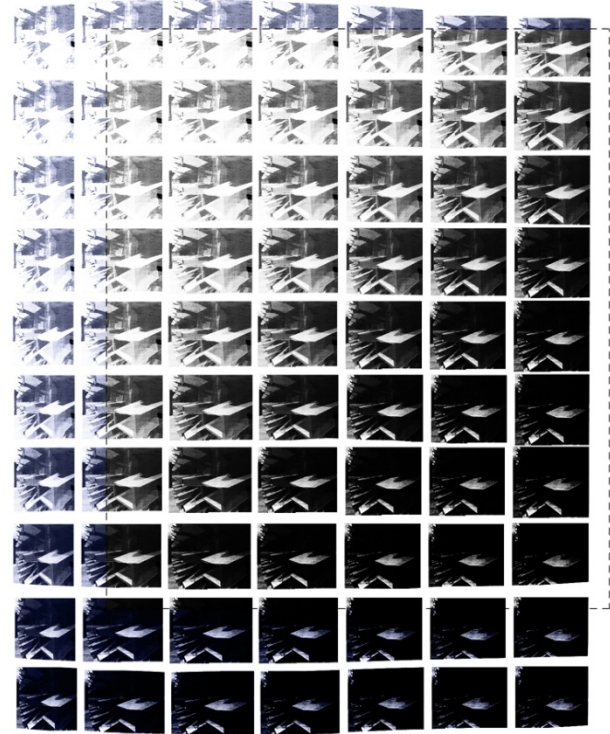


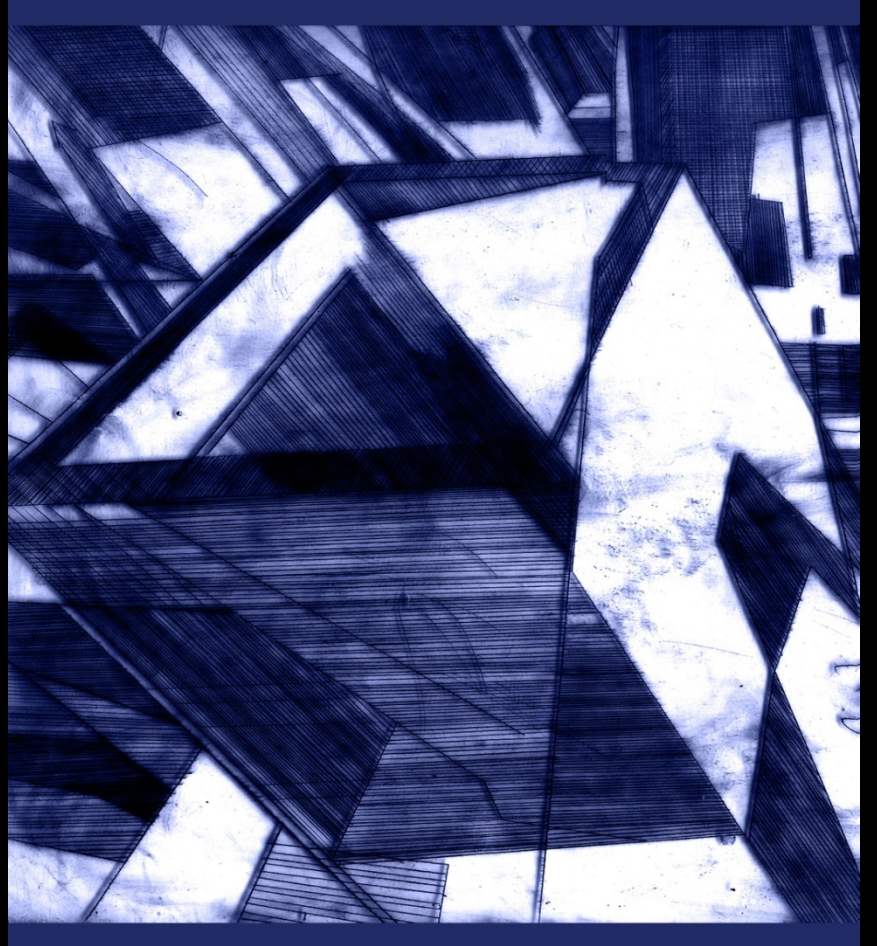
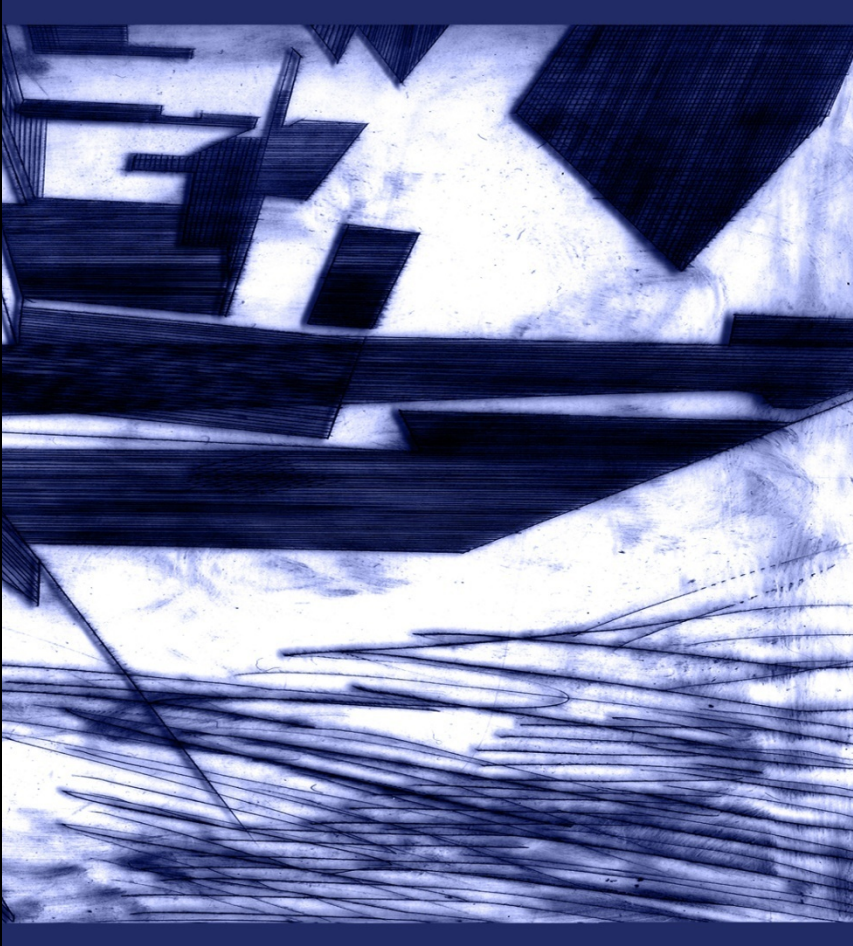


The Jander that lurks in the darkness, feeding upon the light, bending it to its will. This is the room before the room of total black. The room between light and dark.

It is a device for recording the shadows, as to see shadows and to perceive the world (and record it), is to remember.

## 5 Section 5



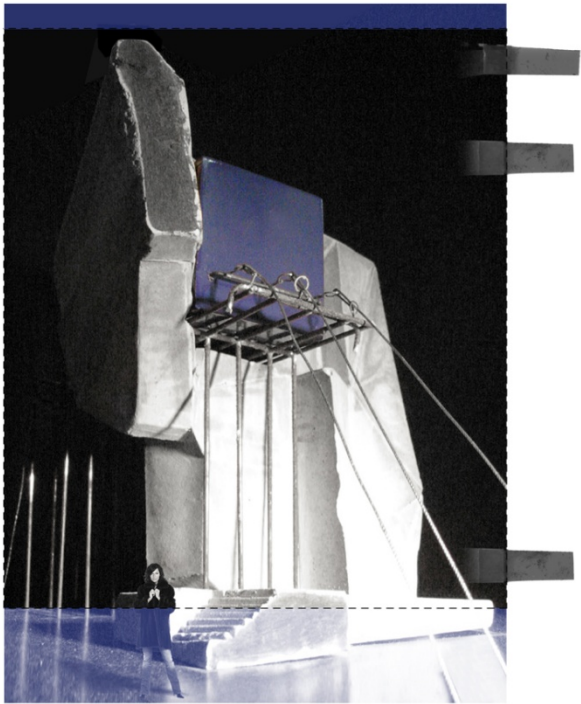




# FINAL DRAWINGS

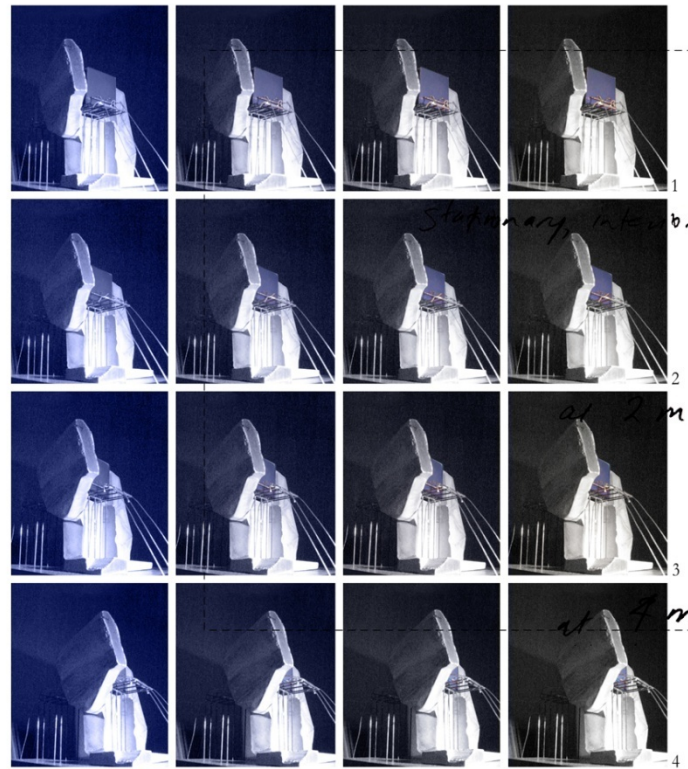
Project 5



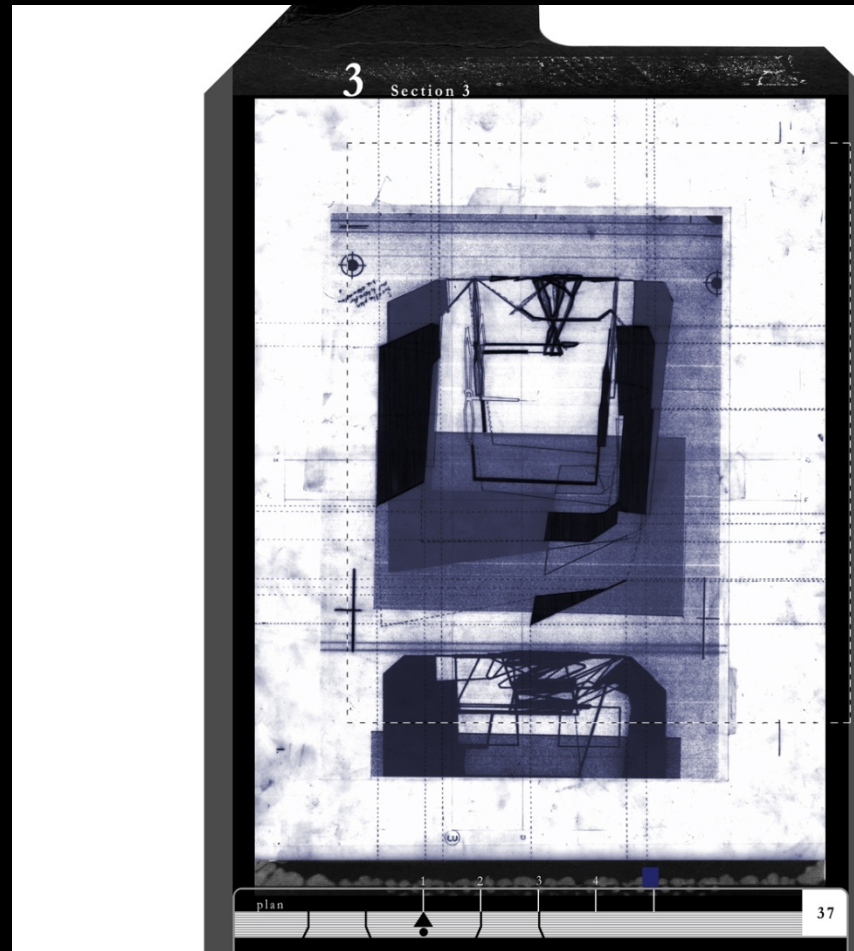
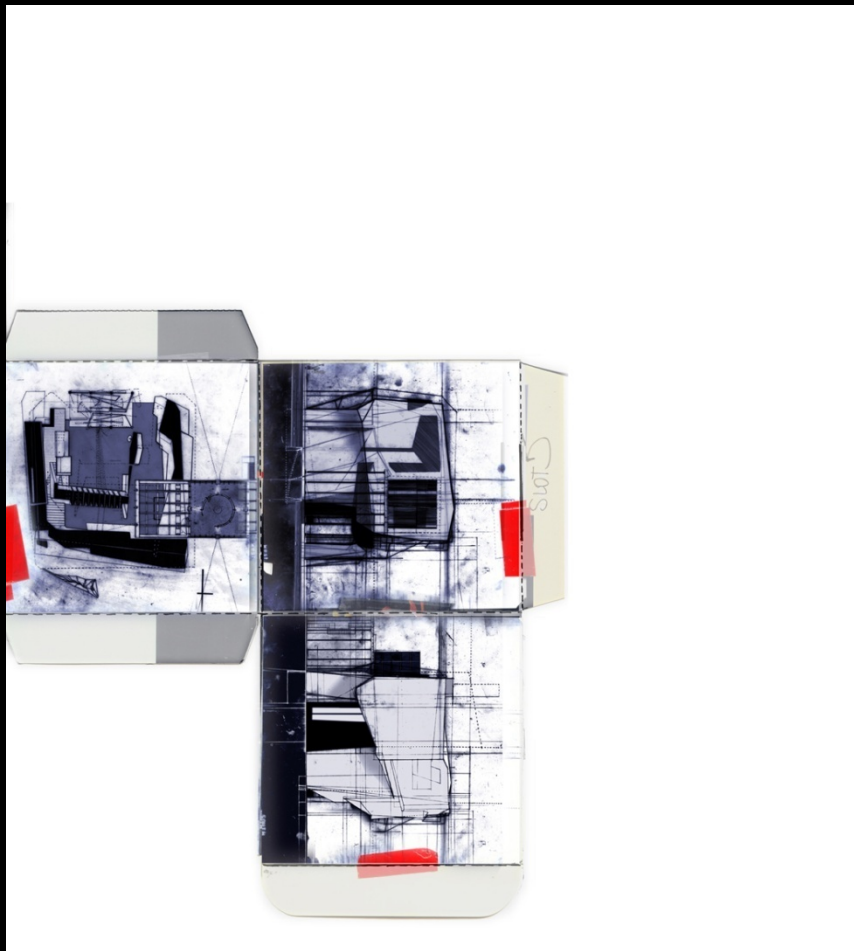


camera obscura room, the artist-workroom.

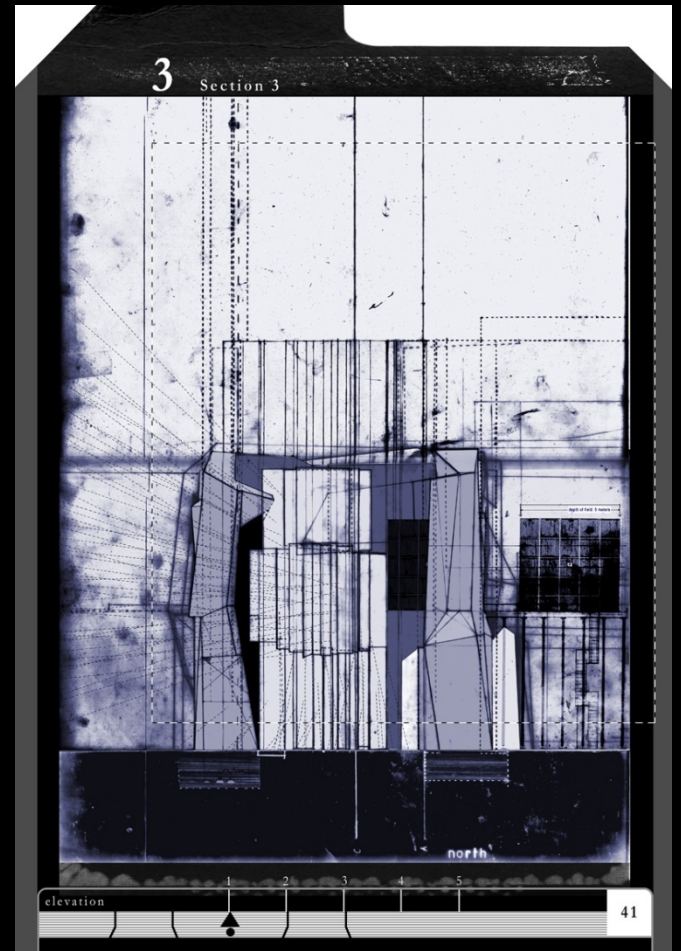
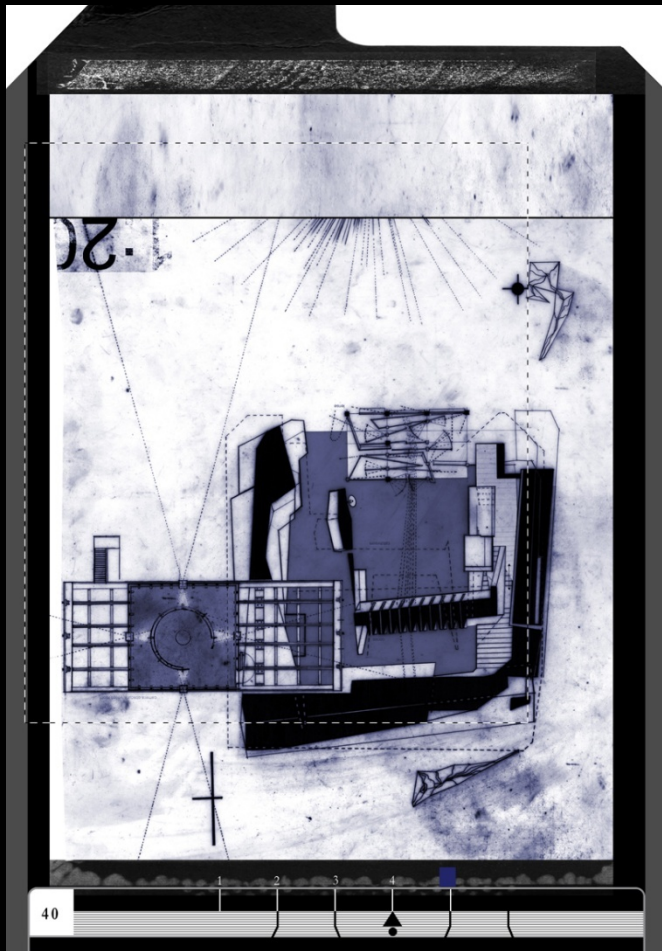
3 Section 3



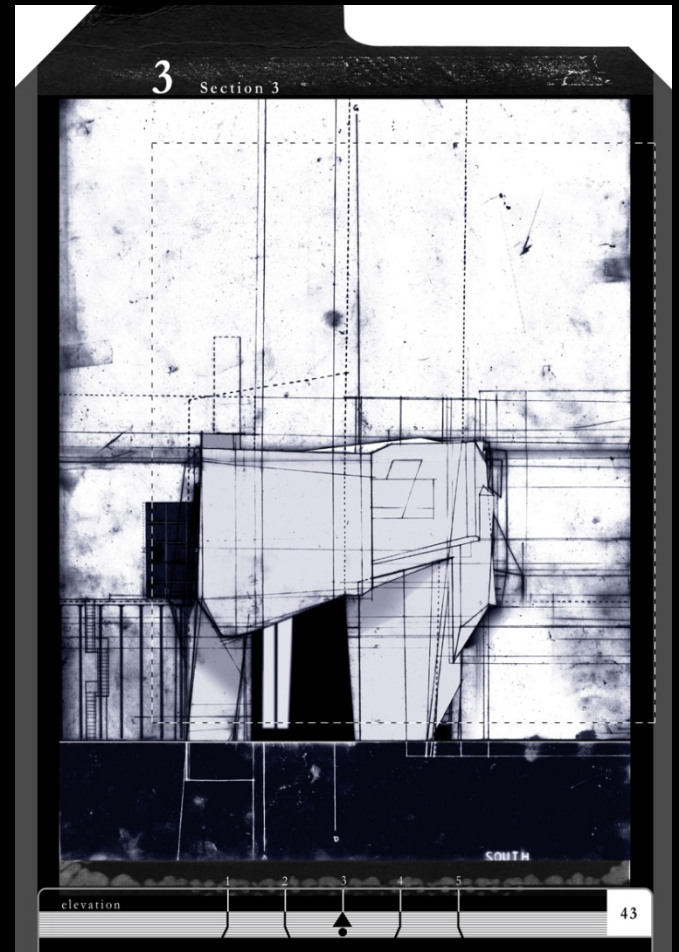
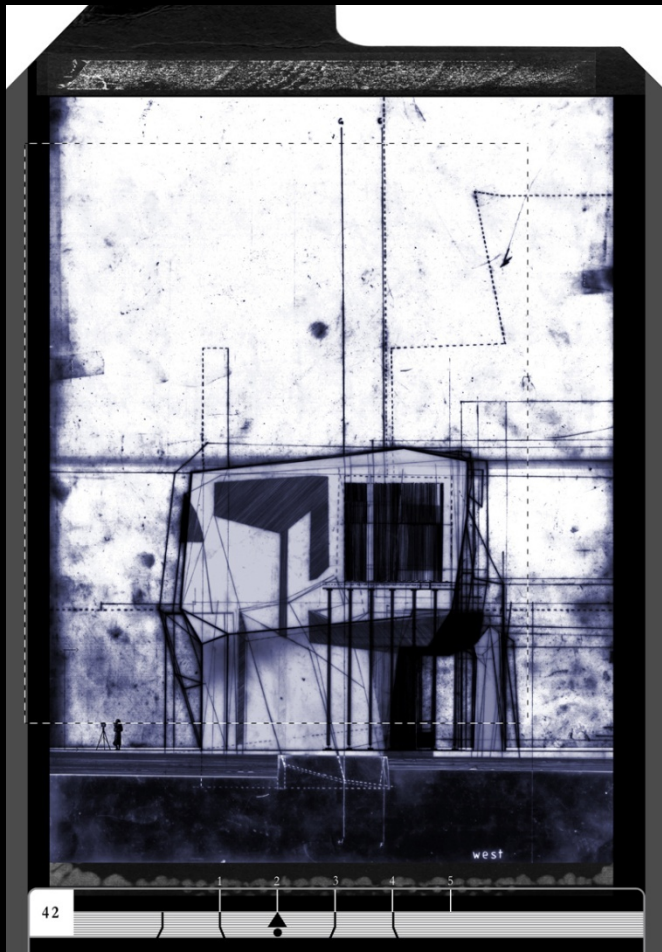
Sectional Model, showing the camera obscura room, the artist-workroom.

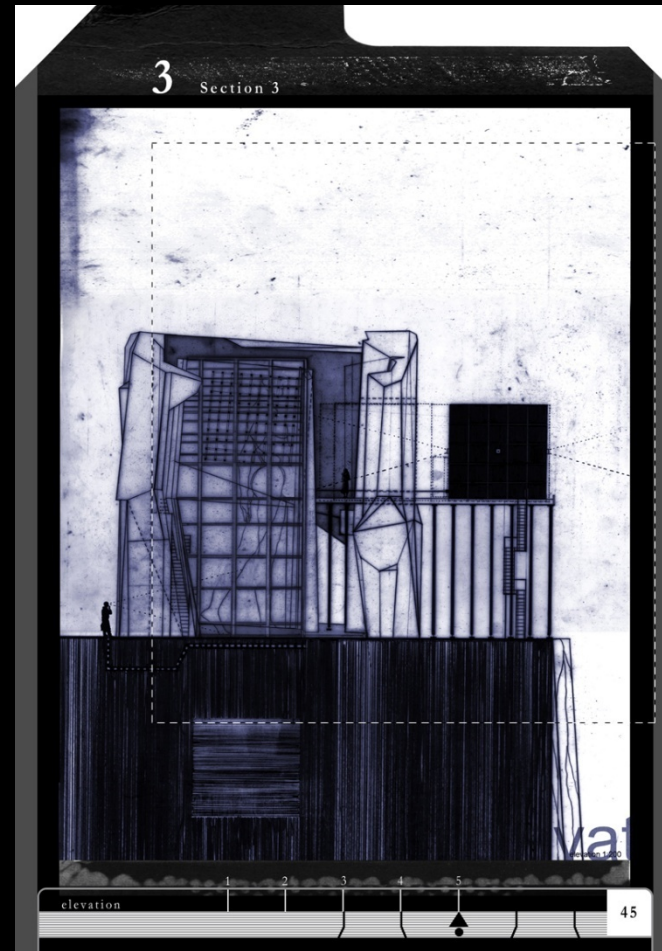
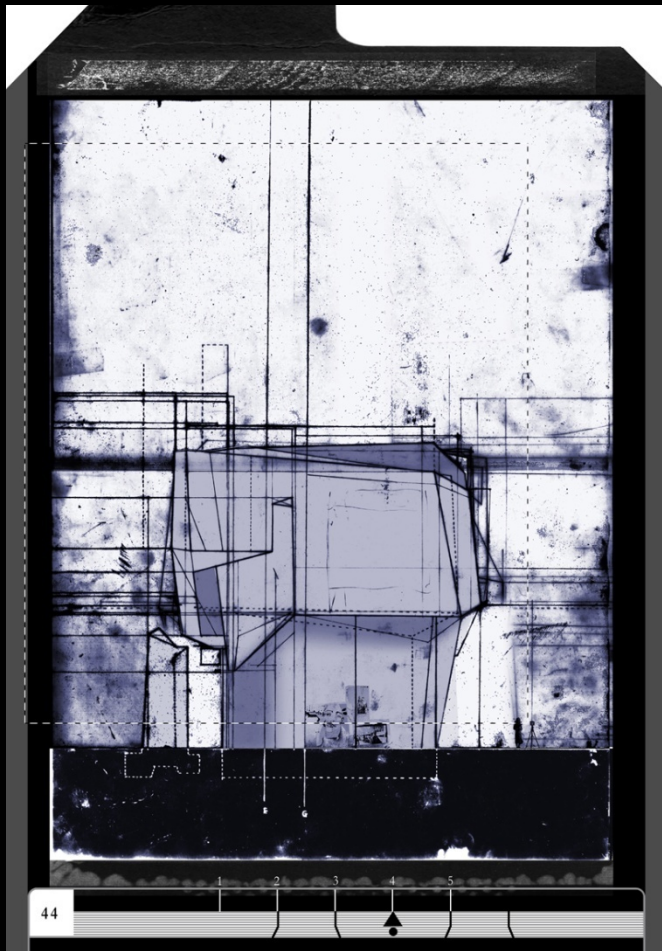




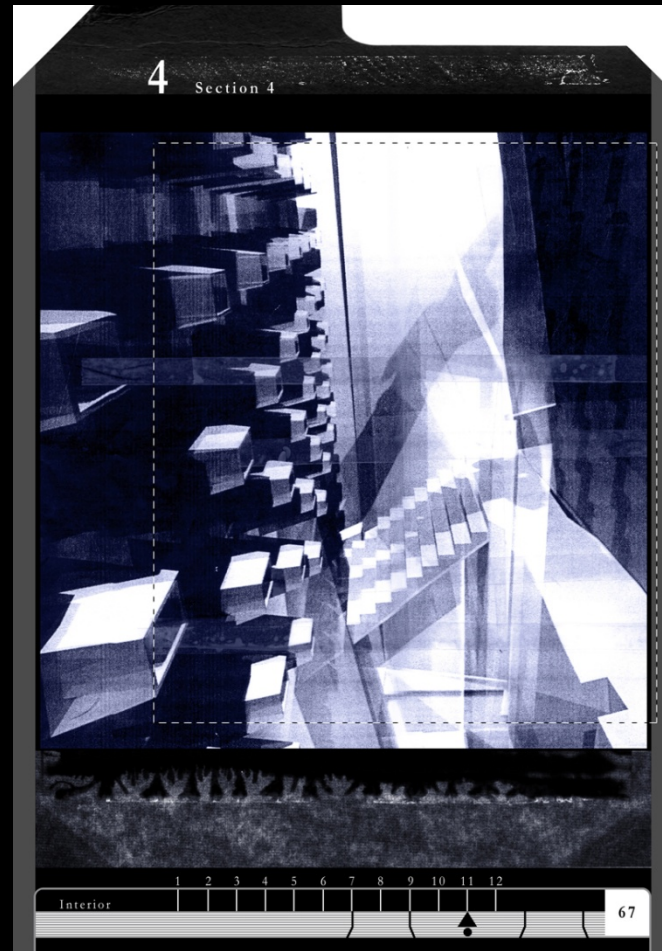
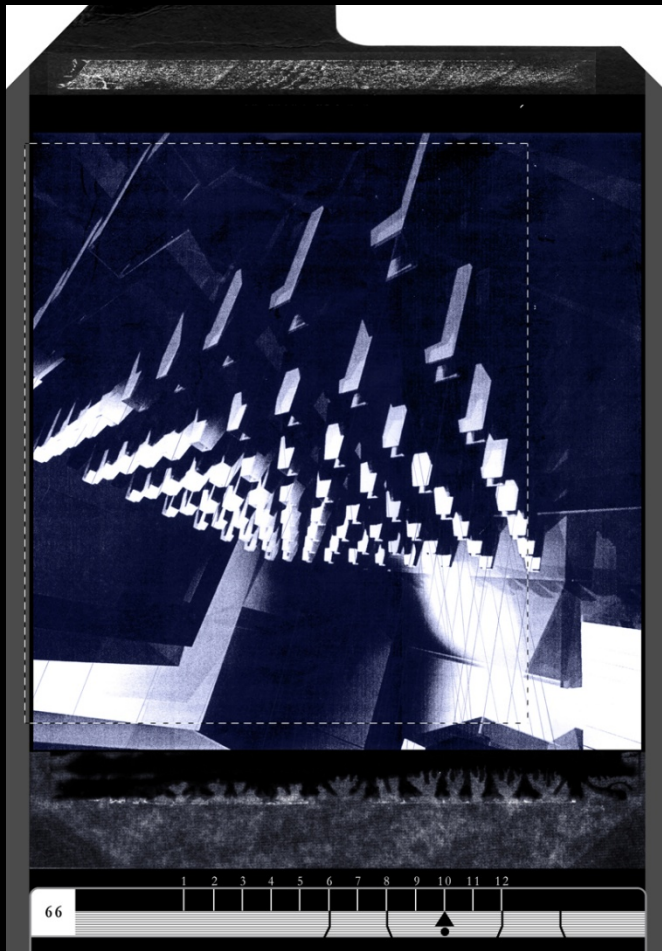


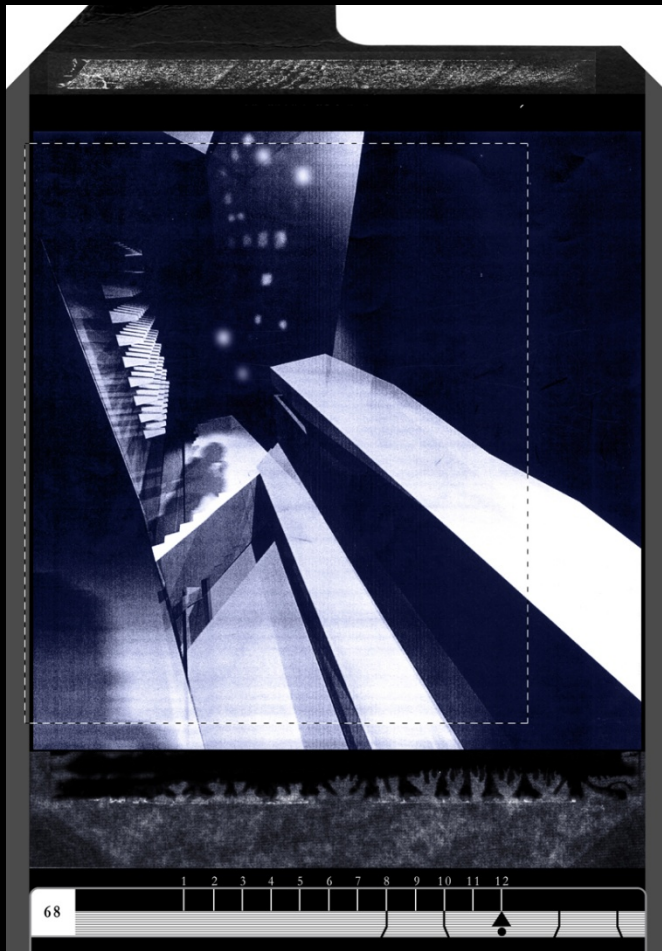




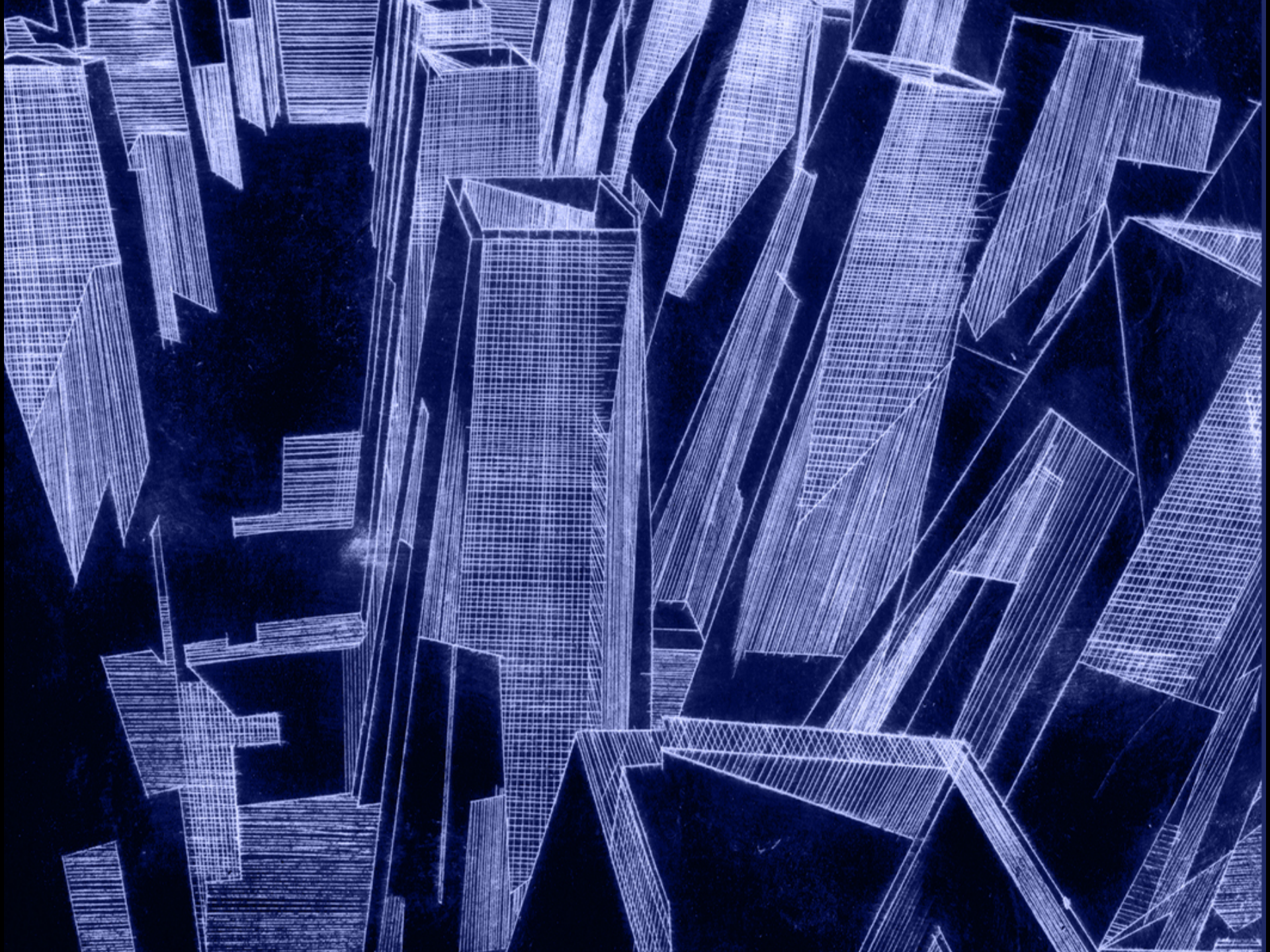








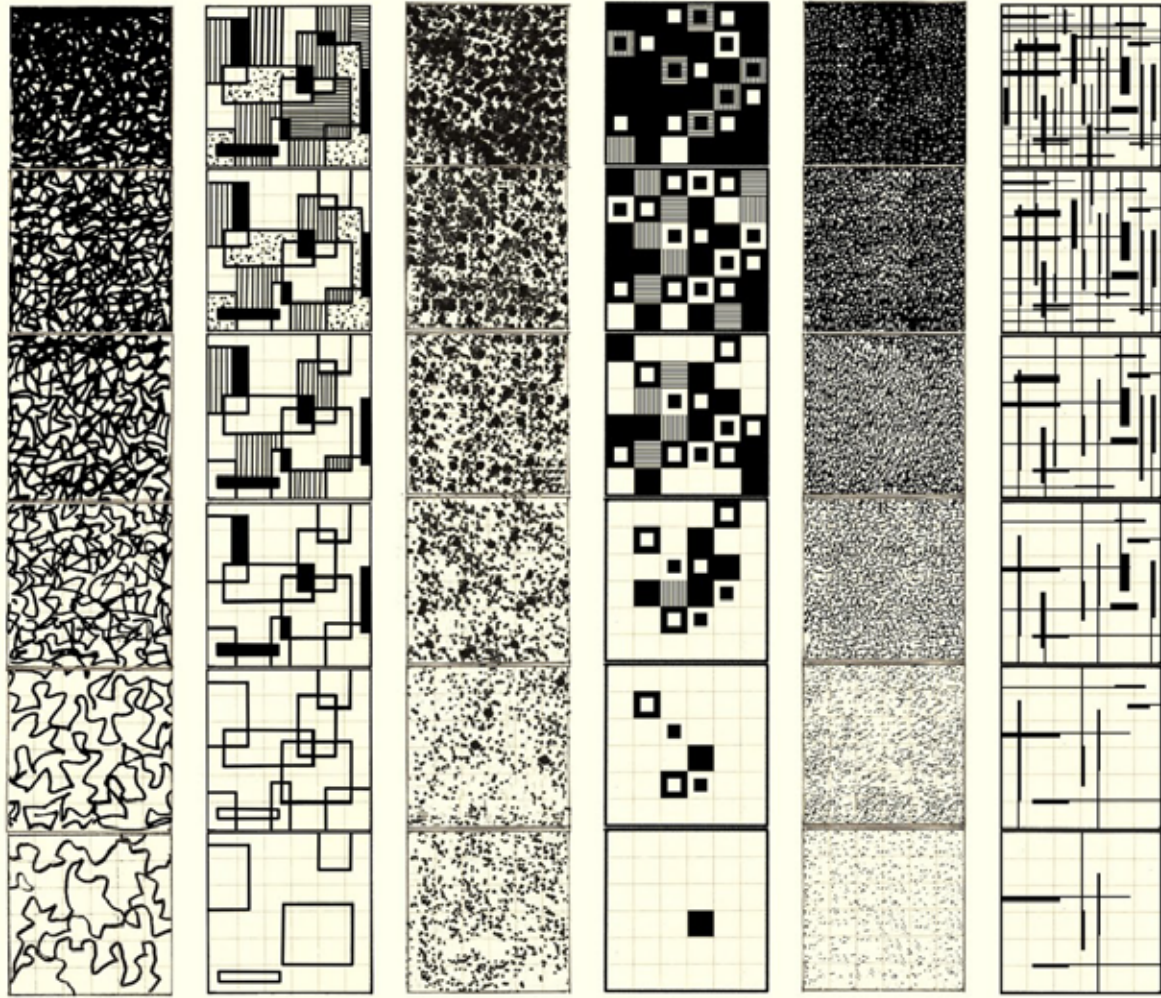








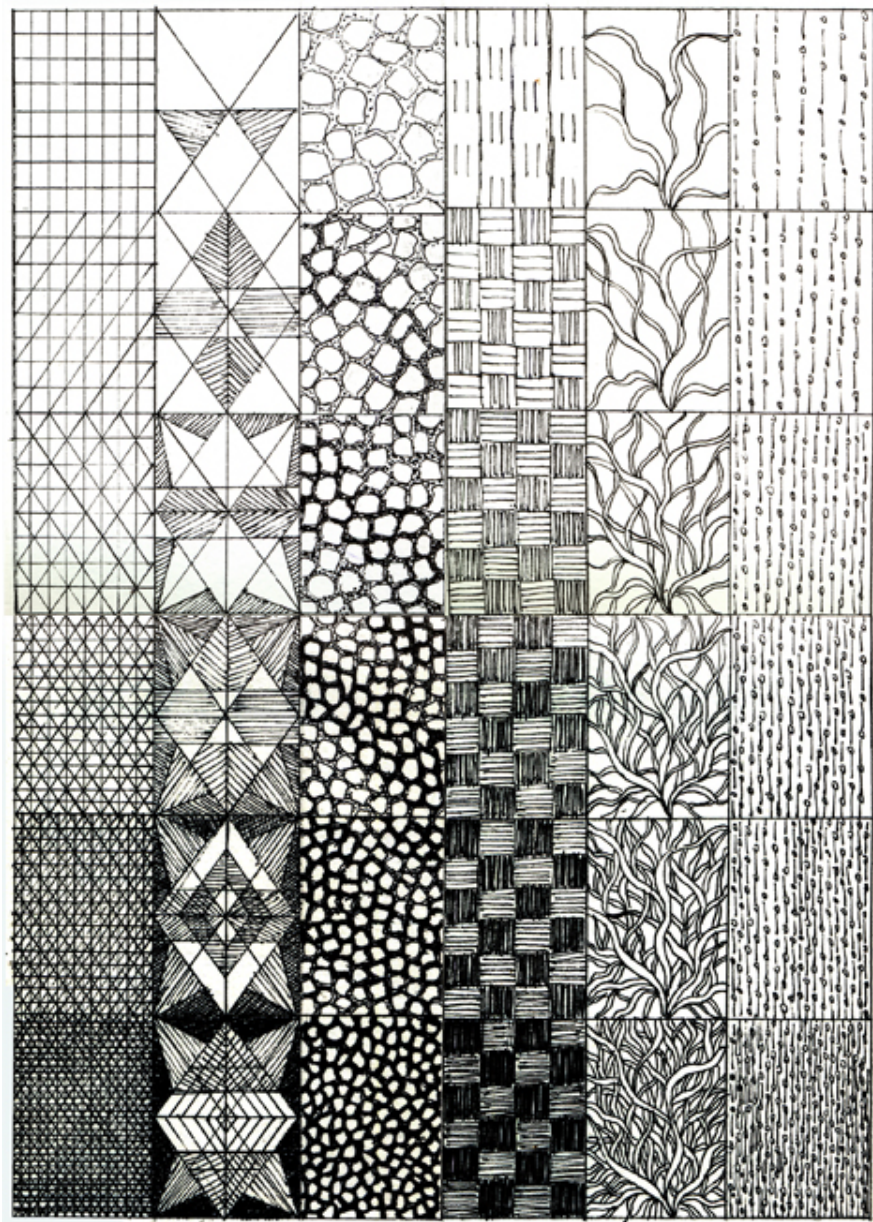
**STUDENT WORK**



36 TEXTURES  
LIGHT TO DARK

WENJUN HU

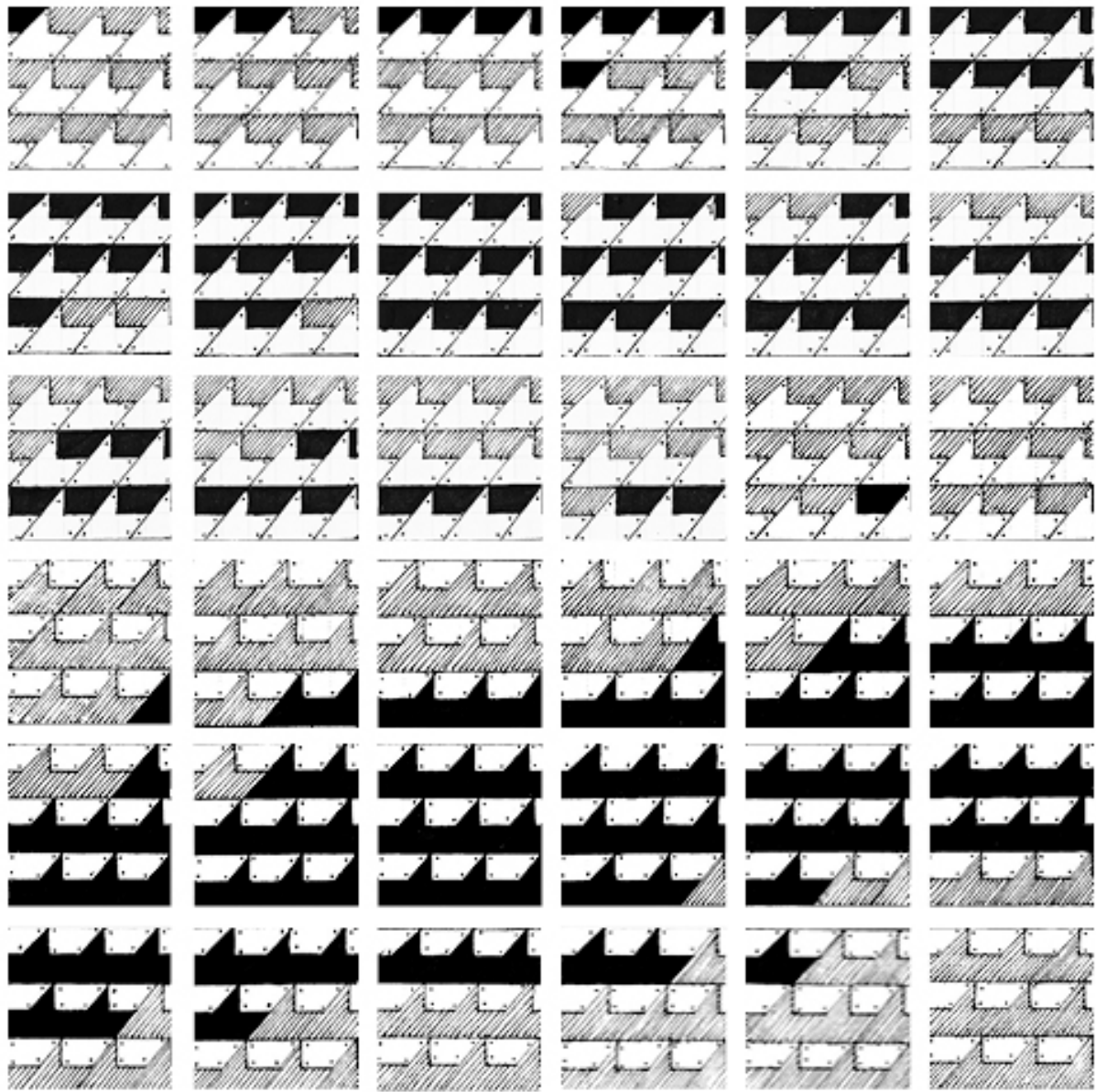




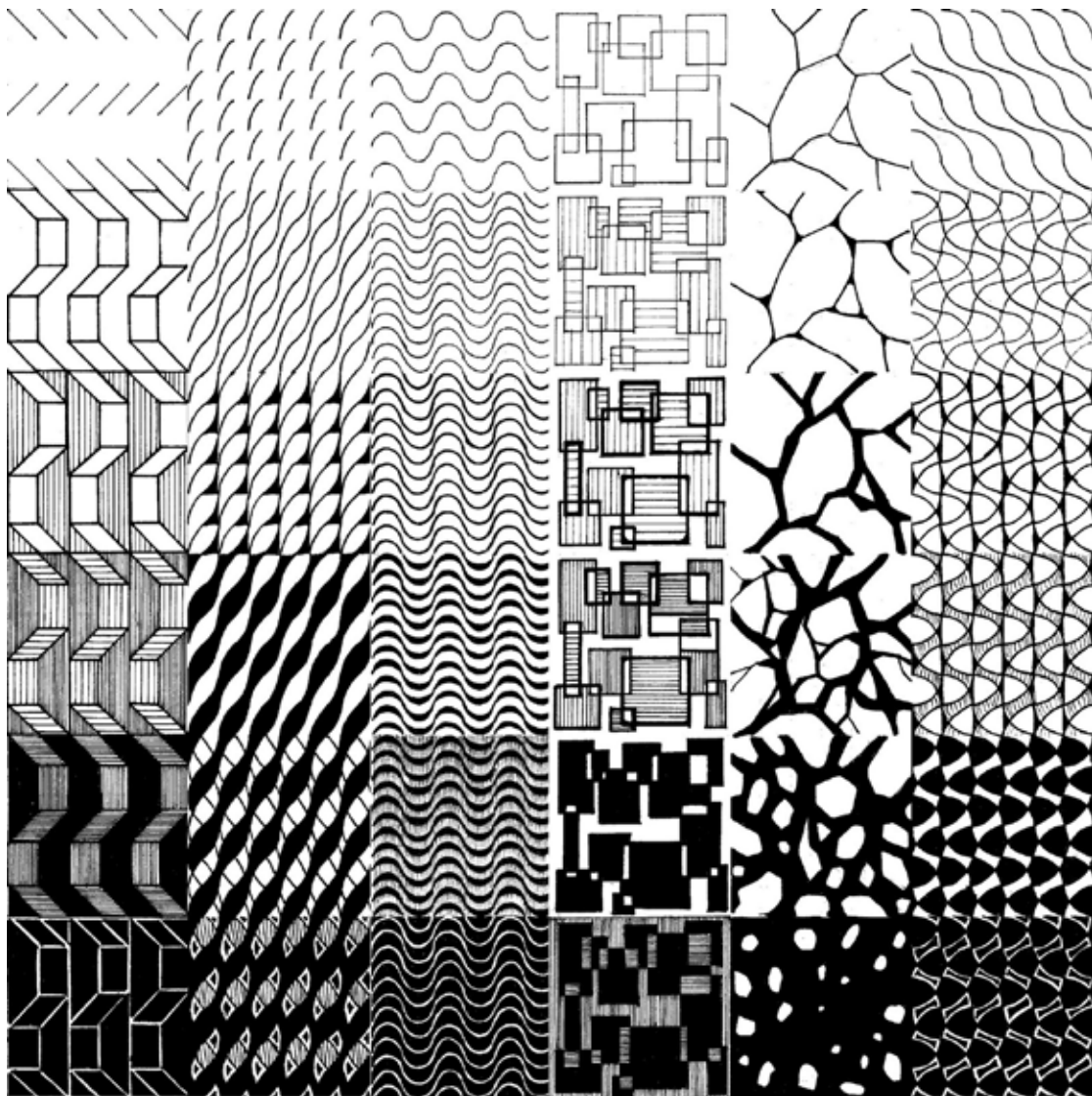
**REBEKAH ARAULLO**



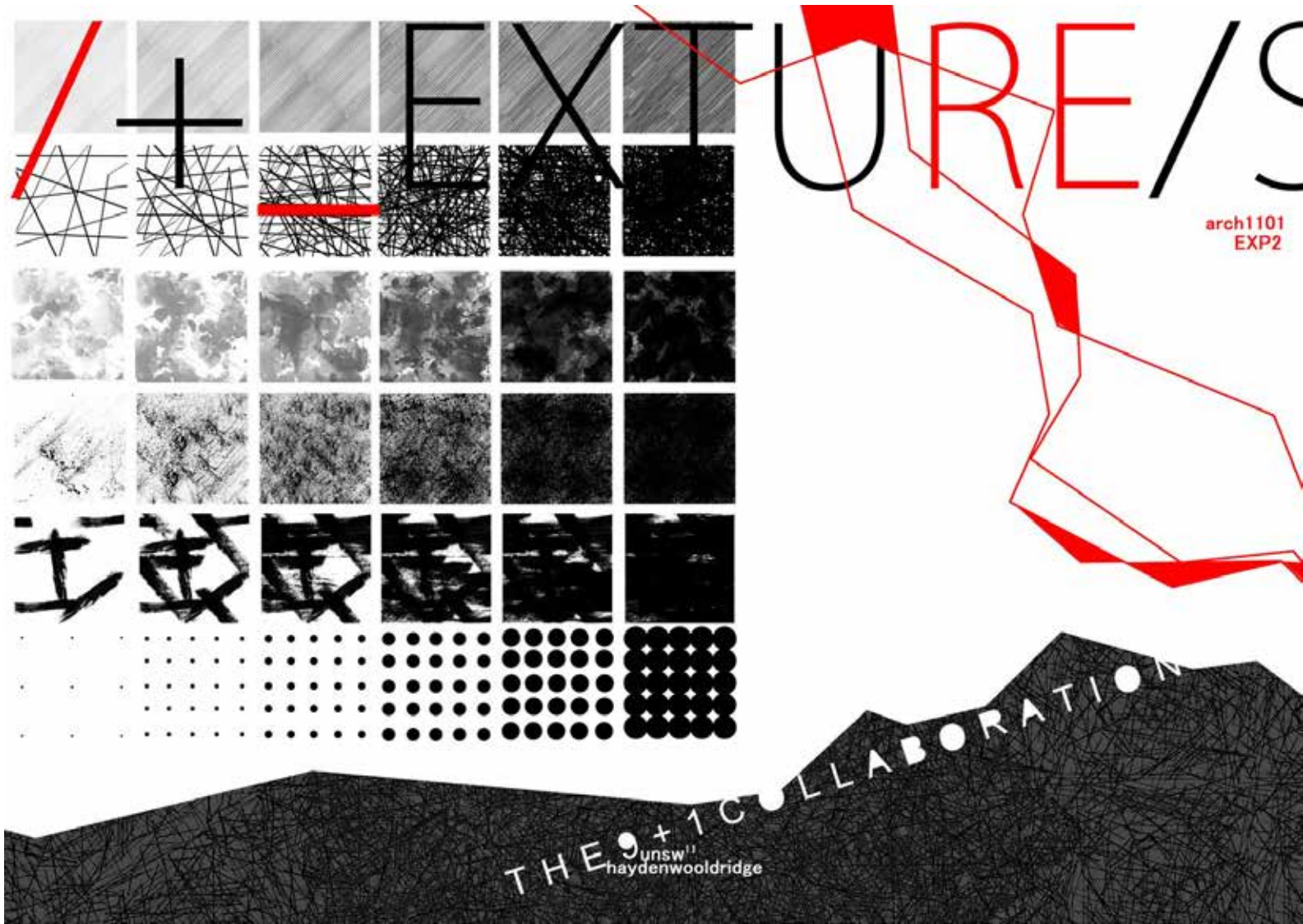




REMY CRICK



**YIMING SONG**



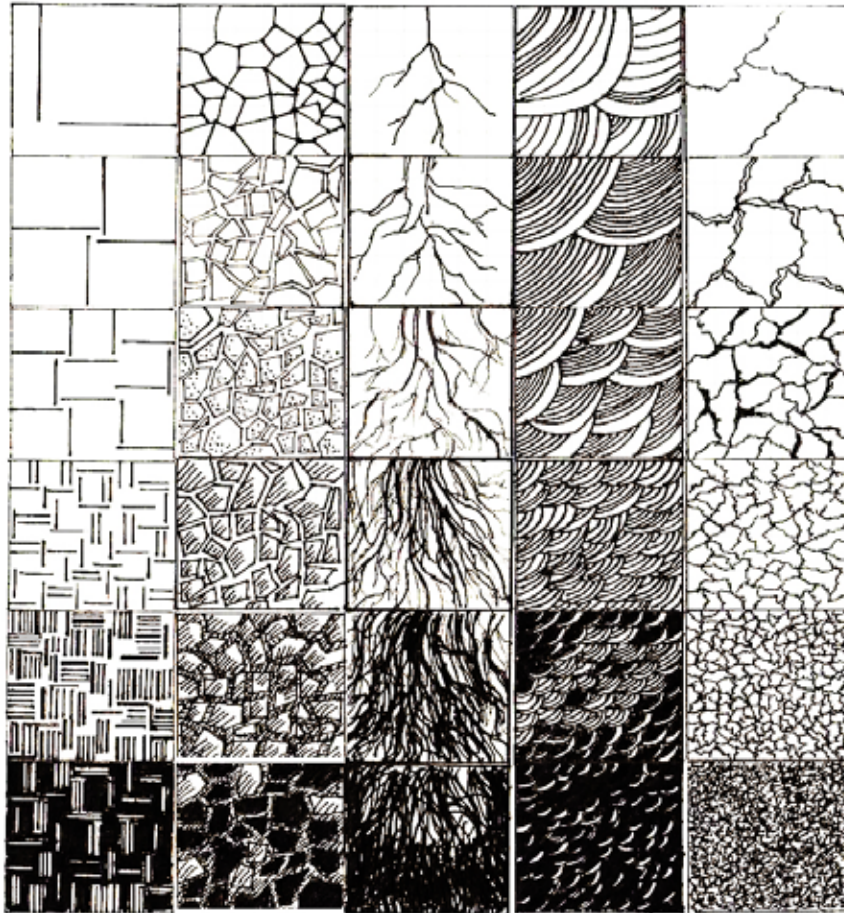
arch1101  
EXP2

THE +1 COLLABORATION  
unsw  
haydenwooldridge

HAYDEN WOOLDRIDGE



## WEEK 03 - Textures



**Above** are the **three main** textures I used.

**Light:** This was used for the whole entire building structure. For the main studios the exterior walls were large scaled when tiled to signify a rocky and marble terrain.

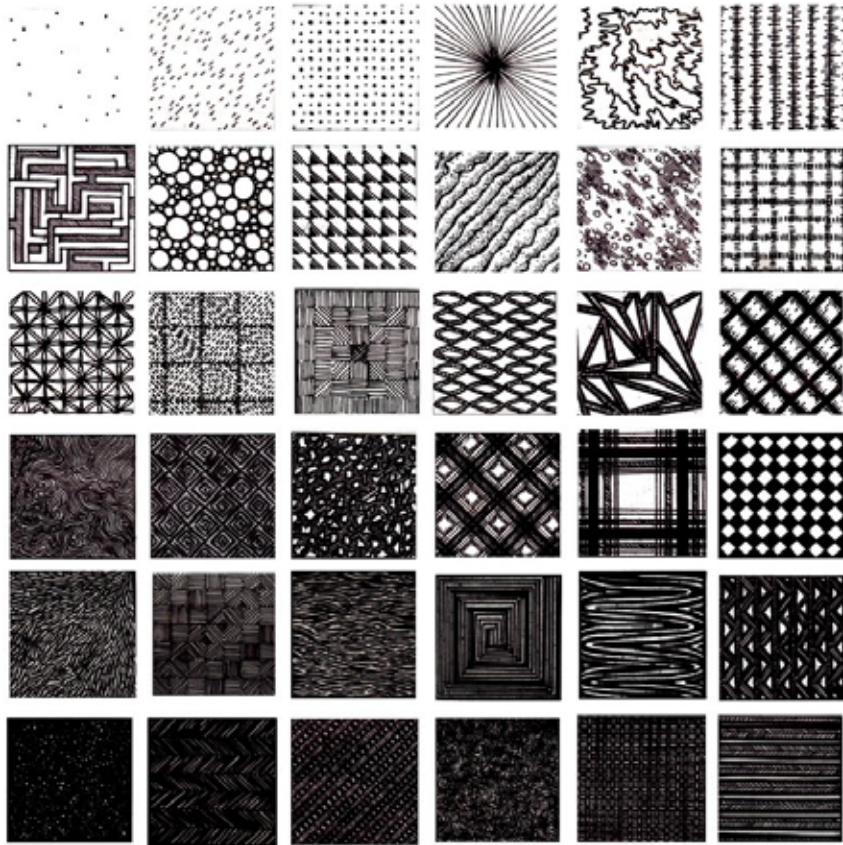
**Medium:** This was used for the stairs, to incorporate a tree-like and also rocky look, and to blend with the environment.

**Dark:** This was used for the meeting square located in the middle of the structure. This shows a bold meeting space, with a granite or marble appeal to it, showing professionalism.

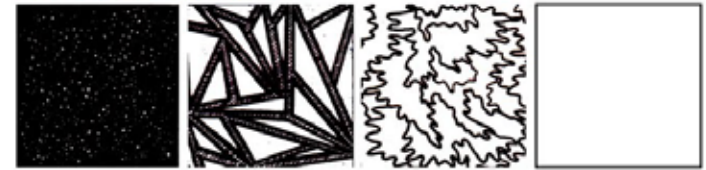
# JAMES IMPERIAL

# EXPERIMENT 2

## THE SPACE BETWEEN



### Textures Applied to Structure



The structure is predominantly textured white. In stark contrast from the grey of the rocky landscape, the labs are made distinctive from their surroundings and are designed to ensure the clients are not distracted, encouraging them to draw inspiration from the natural landscape.

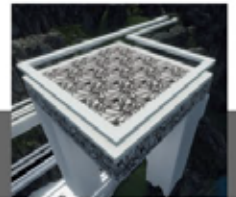
### Light

The light texture has been applied to the entrances of each of the client's labs, intentionally placed in discreet positions that cater to their personalities.



### Medium

The medium texture has been used for the 'meeting place' on the structure - a metaphorical middle ground for the clients to convene upon.



### Dark

The darkest texture has been used to indicate the circulation of the structure, highlighting the areas of the structure that one may walk on.



## 36 TEXTURES

Light to Dark

# JACQUELINE LINDEMAN



# SketchUp Demo: Projected Textures

# TASK FOR TODAY

1. Review a selection of students 'Electroliquid Aggregation' concepts:

“Why still speak of the real and the virtual, the material and immaterial? Here these categories are not in opposition, or in some metaphysical disagreement, but more in an electroliquid aggregation, enforcing each other, as in a two part adhesive.”

Lars Spuybroek, [1998] Motor Geometry, Architectural Design, Vol 68 No 5/6, p5

2. In 6x6 squares draw a series of 36 custom textures that represent the entire range from dark to light.

3. Inspired by your monuments at a macro scale create a series of smaller detail elements and add these to your monuments to reinforce/supplement the electroliquid aggregation that they represent.

Note: throughout the class pairs of students will be critiquing each others images from their Lumion environments and discussing how the landform is, or could be, demonstrating a distinctive and significant approach to bringing the clients together.

## **INDEPENDENT STUDY** Complete by Tuesday May 06 by 12am (midnight).

1. Apply a light, a medium and a dark texture to particularly significant surfaces within your monuments. Upload the entire set of 36 textures to your blog.

2. Continue to develop the landform, the monument and detail elements through to final resolution.

3. Use 'Fraps' to capture five images from your Lumion environment and upload them to your blog. We should be able to see your custom textures in at least 3 of the images. Write short comments (40 words max!) under 3 of the images to indicate how they relate to your "ElectroLiquid Aggregation" quote.

4. Upload your Lumion folder (located in your "my documents" folder) to your FileFront, Dropbox, or similar, user page and provide a link to them from your blog.

5. Upload your final version of the monuments to the SketchUp Warehouse and provide a link to them from your blog. to Google Warehouse and provide a link to them from your blog.

???

**END.**